

LB
1175
.W5

PRACTICAL STUDIES IN THE GIFTS.

¶

ILLUSTRATED
WITH....

CHARACTERISTIC EXERCISES.

— BY —

JEANNETTE GREGORY WEST,

AUTHOR OF

PRACTICAL SUGGESTIONS FOR KINDERGARTNERS.

ST. LOUIS :
WOODWARD & TIERNAN PRINTING CO.,
1899.

TWO COPIES RECEIVED

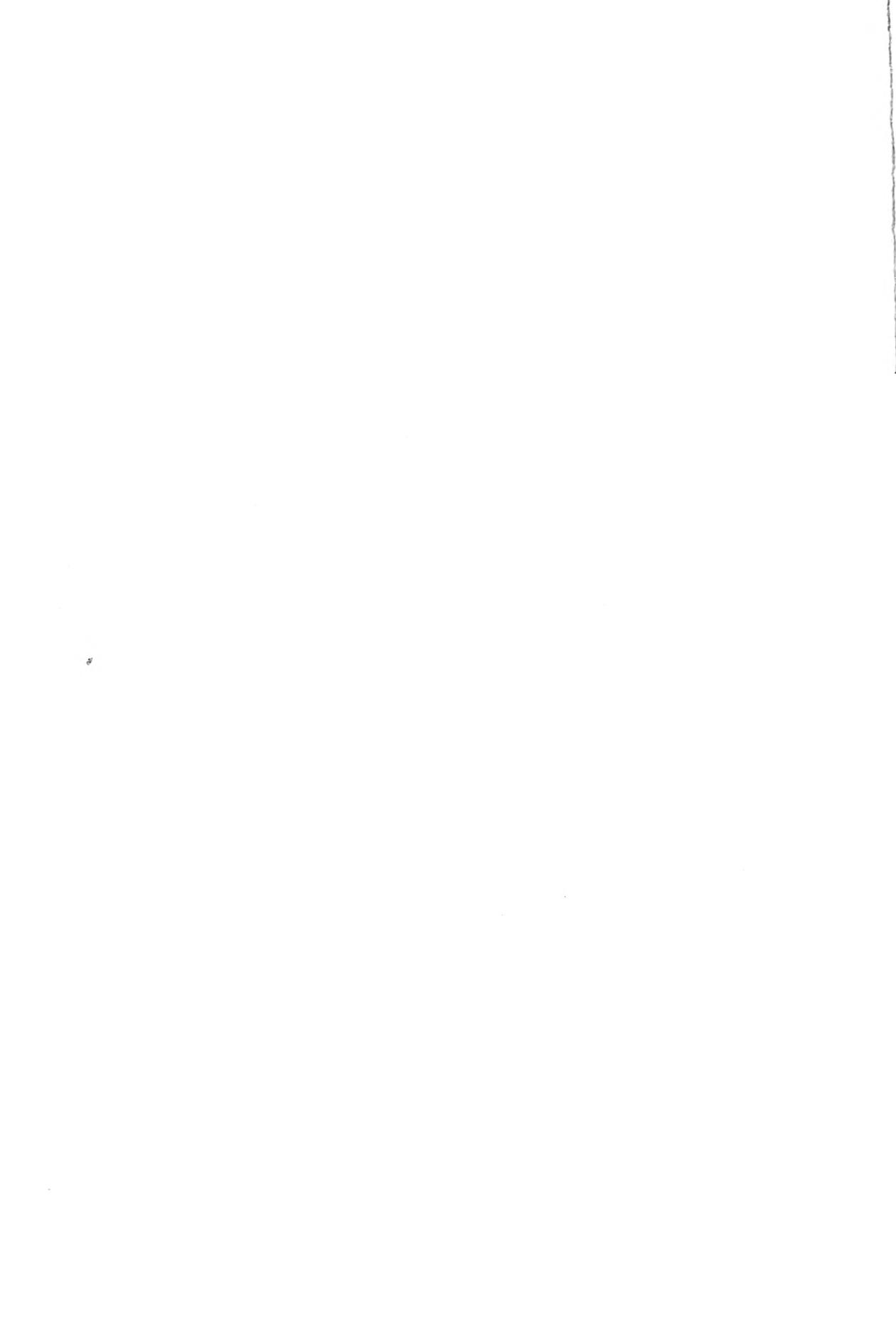
Library of Congress
Office of the
Register of Copyrights
Deli 1 - 1800

卷之三

SECOND COPY,

67566
Oct. 18, 99.

COPYRIGHTED, OCTOBER 18TH, 1899,
BY
JEANNETTE GREGORY WEST.



PREFACE.

THIS work is intended to facilitate the work of the student in the Training Class, by eliminating much of the mechanical work of copying necessary information and so permit of more work in original application of the important characteristics of each gift.

The student should be encouraged to invent exercises which are adapted to the special conditions which she meets in the particular Kindergarten in which she takes observations or does practice work.

While the Gifts lend themselves readily to the expression of even the capricious fancy of the child, it is wise to remember that there are certain fundamental principles involved in their use, upon which depends largely the character-building of the child.

To build the character, we must form the habit; to form the habit we must direct the tendency, and to direct the tendency we must possess the ability to centralize the interest of the child; this ability can only be present in the Kindergartner who has mastered the full possibilities of the Gifts and is therefore in a position to recognize new applications of the principles. She, it is who has inventive children in her Kindergarten *because she knows how to be suggestive without destroying the child's original idea and replacing it with her own.* She lets him build his crude house and come to a consciousness of its lack of doors and windows, through the exercise of his own observation and a silent comparison with the better ones which he sees; in every case where the child can *discover* an original illustration of the idea which is being considered, he is permitted to do so, but a whole idea is required; he is not allowed to begin a half dozen ways without completing any one, and thus his caprice is held in check by creating a love for accomplishment.

Nor should the universal qualities which are presented in such variety in the Gifts, fail to receive their proper share of attention; *sympathetic* presentation of the Gifts should not be construed to mean *sentimental* presentation, and every child should at least live through a definite experience, whether he has reached the point where he is able to formulate the experience or not.



THE KINDERGARTEN.

I. The Kindergarten system is an organic unity composed of many phases, all of which bear some important relation to the development of the child, and are intended to arouse, stimulate and develop the activities by an appeal to Feeling, Thought and Will.

II. Keeping in mind the development which follows voluntary exercise of individual power, the kindergarten places great stress upon creative activity.

III. Universal qualities are presented in direct contrast that the mind may be led to comparison; these contrasts are mediated and resolved into a unity by observing the law of continuity or logical connection.

IV. The objects used are typical in their nature and become therefore the bases for classification of the objects of the external world, while at the same time, their suggestiveness and adaptability render them most valuable in securing the interest and arousing the inherent powers of the child.

GIFTS AND OCCUPATIONS.

The division into Gifts and Occupations, of the material which the child handles daily in the kindergarten, is based upon the fact that one portion is used for transitory expression, while the other portion is used for permanent expression.

Under the head of Gifts therefore is included all material which is held in readiness for the use of the child, at certain times, to express through self-activity, the varied impressions awakened by repeated experiences, after which use, the material is arranged in its proper form and order and removed.

In contrast to these Gifts, the Occupations consist of material furnished the child for the purpose of embodying in permanent outward form, the definite ideas which are the natural outgrowth of systematic expression of experiences through the gifts, and the results are retained by the child as the outward visible evidence of his personal knowledge of the elements used in combination.

The Gifts and Occupations together form a connected sequence, in which there is an orderly movement from solid to point, and from point back again to solid, the movement in the Gifts being analytic, beginning with the solid and by gradual elimination of the dimensions, length, breadth and thickness, arriving at the point, where the Occupations begin a synthetic movement by combining elements, point, line, surface, gradually restoring the dimensions, length, breadth, thickness, and thereby arriving at the starting point, i. e., solid.

THREE DIVISIONS OF GIFTS.

The Gifts divide naturally according to their general characteristics into three sets, or groups.

I SET.

Consisting of undivided solids, includes two gifts, called First and Second Gifts; the objects in this set are complete in themselves and are not vitally related in the sense of being dependent one upon the other, the removal of one form, not affecting the others, yet all are

necessary to maintain a unity based upon an external idea which connects them, and which is developed by a comparison of resemblances and differences in the qualities of the objects as wholes, these distinctions being made not in any one, but between the several objects.

The First Gift consists of six soft woolen balls, each having a string attached and showing the six normal colors, red, orange, yellow, green, blue, violet.

The Second Gift consists of a wooden sphere, cube and cylinder.

II SET.

Consisting of divided solids, includes four gifts, called the Building Gifts, because of their division into parts, which makes it possible to transform the original whole into new and varied wholes.

In this set the unity is inherent and the relation between parts and whole is vital, because of the dependence of one upon the other; emphasis is placed upon the construction of wholes and thus the tendency to use every element to create wholes is established; this concrete experience with external wholes leads to the development of the idea of wholes in the mind of the child.

There is a progressive advance in the four gifts, involving increasing complexity in number and form relations and demanding a constantly increasing capacity on the part of the child.

The Third Gift is a two-inch cube divided into eight small cubes, the parts being similar to each other and to the whole gift.

The Fourth Gift is a two-inch cube divided into eight oblong prisms or parallelopipeds, the parts being like each other, but unlike the whole.

The Fifth Gift is a three-inch cube divided into thirty-nine (39) parts, twenty-one (21) of which are cubes resembling each other and also the whole gift, while eighteen (18) parts are triangular prisms of two sizes, like each other, but unlike the whole.

The Sixth Gift is a three-inch cube divided into thirty-six (36) parts, eighteen (18) of which are oblong prisms or parallelopipeds, twelve (12) square prisms whose bases are one-inch squares, and six (6) square prisms whose bases are one-half ($\frac{1}{2}$) inch squares.

III SET.

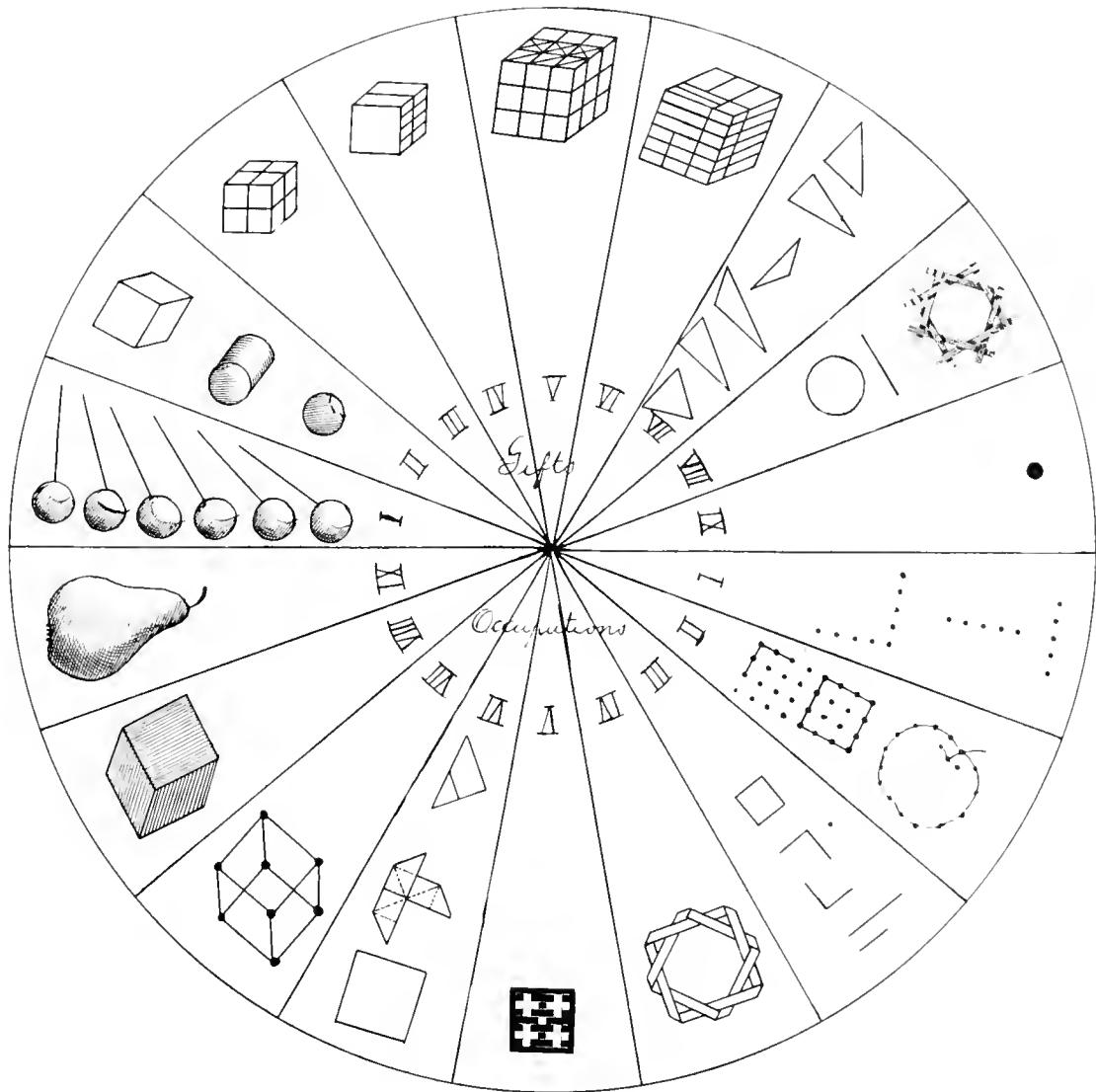
Consisting of separate, unrelated elements, representing planes, lines and points, includes three gifts, Seventh Gift, Eighth Gift and Ninth Gift.

In this set of gifts the unity is not emphasized as the child is supposed to have passed from the stage where the external whole is necessary, and the idea of wholes having been established in the mind, he is able to use the separate elements to express in visible form, an idea which exists as a unity in his own mind.

The Seventh Gift consists of an assortment of wooden tablets representing geometric planes: square, right, acute, and obtuse isosceles triangles, right and obtuse scalene, and equilateral triangles.

The Eighth Gift represents the line and should include the slats for interlacing, sticks of various lengths, and rings, half rings and quarter rings.

The Ninth Gift represents the point and consists of lentils or small seeds.



RELATIONSHIP OF THE GIFTS AS A WHOLE, TO THE CHILD.

Since Froebel emphasizes so strongly the necessity for arousing every part of the child's nature, it follows that the exercises with the gifts should make a well-balanced appeal to Feeling, Thought and Will, and also suggest the relationship to Nature, to Man and to God.

The sympathetic side is aroused by connecting the exercises with his home and daily experiences; his thought is stimulated by observation, formulation, and analysis, and his Will strengthened by requiring definite acts in accordance with established law.

In order that the child's relationship to Nature may be defined through the use of the gifts, they are arranged to suggest the two great classes in Nature, the Inorganic and the Organic; through the quality of Form they are related to the material objects of Nature and thus become types by which these objects maybe classified thereby serving as a key to unlock the mysteries of the universe through a knowledge of universal qualities.

The relationship to humanity is suggested by the representation of the productions of man which surround the child, familiarizing him with the activities of the producing world, with the elements of artistic production, and the laws of proportion which govern harmonious construction.

The relationship to God is manifest in the effort to lead the child from an external sense of unity to an individual conception of unity back of all variety, by relating all separate conditions into a connected whole bound together by a single vital thought; thus the conception of the created world as an expression of God's thought begins to be dimly felt by the child, the more so because of the already existing power of spiritual discernment which he possesses.

*To this end we may deduce the following points—*All gift exercises should

1. Emphasize some salient idea.
2. Afford the child an opportunity for individual self-expression.
3. Arouse, stimulate and develop creative activity.

This is accomplished through the three sets of gifts, as follows:

I SET.

I. The salient idea is to bring the universe into the child's experience through reflection, by arousing and directing observation upon familiar objects.

II. They afford the child a simple means for self-expression because they arouse his indefinite thought by their suggestive adaptability.

III. They arouse creative activity, by securing the child's interest in the active side of life.

II SET.

I. The salient idea is to embody the idea of organic unity and to hold up progression as a condition of development.

II. They stimulate self-expression, through constructive activity based upon individual investigation.

III. They *stimulate* creative activity, by the application of the child's experiences in the production of new wholes which gratify his desire to see the result of his efforts.

III SET.

I. Salient idea, to emphasize the relation of elementary form to objects and design.

II. They *develop* self-expression by removing the limitation of relationship of parts, which, of course, removes all suggestiveness.

III. They *develop* creative activity by permitting absolute liberty in combination, thus leading the child to plan his form mentally before attempting to produce it externally.

PRACTICAL PURPOSE OF THE GIFTS AS A WHOLE.

I. To furnish an organized set of experiences, whereby the child may be led to abstract the universal qualities common to all objects by receiving concrete impressions of these qualities in striking contrasts.

II. To furnish legitimate bases for the classification of external objects by presenting the typical form, a conception of which enables the child to recognize any modification of type.

III. By simple application of concrete illustration, to present fundamental truths, such as unity, continuity, mediation, sequence, etc.

IV. By engaging the child's interest in objects with which he is familiar, to arouse and stimulate creative activity.

While every part of the K. G. system takes cognizance of the threefold nature of the child, it is the province of the Gifts to further his development by appealing more particularly to his thought, hence we perceive in the gifts a great variety of opportunities for analysis of universal qualities.

DEFINITIONS.

1. Geometry is that branch of pure mathematics that treats of space and its relations; the science of position and extension.
2. Extension is that property of matter, by virtue of which it has length, breadth, and thickness.
3. A point has position merely; no extension.
4. A line has length only.
5. A surface has length and breadth.
6. A solid has length, breadth and thickness.

LINES.

1. A straight line is the shortest distance between any two points.
2. A polygonal line is one composed of a number of straight lines.
3. A curved line is one which changes its direction at every point.
4. Parallel lines are straight lines which have the same direction.
5. Two curves which are everywhere the same distance apart, are called concentric curves.
6. A vertical line is one which is perpendicular to the horizon.
7. A horizontal line is one which is parallel to the horizon.
8. An oblique line is one which inclines between vertical and horizontal.

ANGLES.

1. An angle is formed by two lines meeting or crossing each other.
2. When one straight line meets or crosses another, so as to make the two adjacent angles equal, each of these angles is called a right angle and the lines are said to be perpendicular to each other.
3. An acute angle is one less than a right angle.
4. An obtuse angle is one greater than a right angle.

PLANE FIGURES BOUNDED BY CURVED LINES.

1. A circle is a plane figure bounded by a curved line called the circumference, every point of which is equally distant from a point within called the center.
2. An ellipse is a plane figure bounded by the intersection of a plane and cone, when the plane passes obliquely through the opposite sides of the cone.
3. An oval is a figure resembling the longitudinal section of an egg.

POLYGONS.

1. A polygon is a plane figure terminated on all sides by straight lines.
2. A polygon of three sides is a Triangle.
A polygon of four sides is a Quadrilateral.
A polygon of five sides is a Pentagon.
A polygon of six sides is a Hexagon.
A polygon of seven sides is a Heptagon.
A polygon of eight sides is an Octagon.
A polygon of nine sides is a Nonagon.
A polygon of ten sides is a Decagon.
A polygon of eleven sides is a Undecagon.
A polygon of twelve sides is a Dodecagon.

TRIANGLES.

1. An Equilateral Triangle is one having three equal sides.
2. An Isosceles Triangle has only two sides equal.
3. A Scalene Triangle has no two of its sides equal.
4. A Right Triangle is one which has one right angle; the side opposite to the right angle is called the hypotenuse.
5. Isosceles and Scalene Triangles may be distinguished as follows:
Right, when one angle is a right angle.
Obtuse, when one angle is an obtuse angle.
Acute, when all angles are acute.

QUADRILATERALS.

1. A Parallelogram is a Quadrilateral whose opposite sides are parallel; of these there are four: Square, Oblong, Rhombus and Rhomboid.
2. A Rectangle is a Parallelogram whose angles are all right angles; of these there are two: the Square and Oblong.
3. The Square is a Rectangle all of whose sides are equal.
4. The Oblong is a Rectangle whose adjacent sides are not equal.
5. The Rhombus is a Parallelogram all of whose sides are equal, but whose angles are not right angles.
6. The Rhomboid is a Parallelogram whose adjacent sides are not equal and whose angles are not right angles.
7. The Trapezoid is a Quadrilateral which has only two sides parallel; of these, there are two, shoe-shaped and boat-shaped.
8. The Trapezium is a Quadrilateral no two of whose sides are parallel.

SOLIDs.

1. A Sphere is a solid bounded by one curved surface, all points of which are equally distant from a point within called the center.
2. A Spheroid is a solid resembling the sphere, produced by the revolution of an Ellipse around one of its axes.
3. An Oblate Spheroid is produced by the revolution of an ellipse upon its conjugate axis.

4. A Prolate Spheroid is produced by the revolution of an ellipse upon its transverse axis.
5. A Polyhedron is a solid bounded by plane faces.
6. A Polyhedron of four faces is a Tetrahedron.
A Polyhedron of six faces is a Hexahedron.
A Polyhedron of seven faces is a Heptahedron.
A Polyhedron of eight faces is an Octahedron.
A Polyhedron of twelve faces is a Dodecahedron.
A Polyhedron of twenty faces is an Icosahedron.
7. A Prism is a solid, comprehended under several parallelograms, and having for its bases equal polygons lying in parallel planes.
8. A Right Prism is one whose lateral faces are perpendicular to its bases.
9. An Oblique Prism is one whose altitude is less than the length of its sides.
10. The Cube is a rectangular parallelopiped comprehended under six equal squares.
11. A Cylinder is a prism having for its bases polygons of an infinite number of sides. (i. e., circles.)
12. A Pyramid is a solid formed by several triangular planes, proceeding from a point, and terminating in the sides of a polygon.
13. A Pyramid whose base is a polygon of an infinite number of sides is called a cone.
14. The Frustum of a Pyramid or Cone is that portion which remains after taking away the smaller pyramid or cone, which has been cut by a plane parallel to the base.

ELEMENTS OF MATHEMATICAL FORM.

1. Point.	2. Lines. Curved. Straight. Vertical. Horizontal. Oblique.	3. Angles. Right. Acute. Obtuse.
-----------	---	---

PLANES.

Plane Figures bounded by Curved Lines.

Circle.

Ellipse.

Oval.

POLYGONS, OR PLANE FIGURES BOUNDED BY STRAIGHT LINES

TRIANGLES.

Equilateral.	Isosceles.	Scalene.
	Right, Acute, Obtuse.	Right, Obtuse.

QUADRILATERALS.

Parallelograms.	Trapezoids, Boat and Shoe-shaped.
Rectangles, Square and Oblong.	Trapezium.
Rhombus.	
Rhomboid.	

Polygons of more than four sides.

Pentagon.	Nonagon.
Hexagon.	Decagon.
Heptagon.	Undecagon.
Octagon.	Dodecagon.

SOLIDS.

1. Solids bounded by curved surface.

Sphere.	Spheroid,	Conoid.	Ovoid,
	Oblate, Prolate.		

2. Solids bounded by Polygons.

Prisms.

Triangular Prism.
Cube, which is also a Square Prism.
Square Prism.
Oblong Prism.
Rhombic Prism.
Rhomboidal Prism.
Trapezoidal Prism.
Prism, whose bases are Trapeziums.
Pentagonal Prism.
Hexagonal Prism.
Heptagonal Prism.
Octagonal Prism.

Pyramids.

Triangular—(Base may be any triangle.)
Quadrangular—(Base may be any quadrilateral.)

3. Solids bounded by curved and straight surfaces.

Prism—Cylinder.

Pyramid—Cone.

KINDERGARTEN METHOD OF DEVELOPING TYPICAL IDEAS.

PROCESS.

1. Begin with an activity.
2. Tell what you have done.
3. Does anything else do this?
4. Does this do anything else?
5. Make the object.
6. Make things from the object.

GENERALIZATION.

1. Activity in contrast.
2. Observation and statement.
3. Illustration of the general idea.
4. Progressive definition of individual object.
5. Reproduction.
6. Transformation, or application.

INTELLECTUAL RESULTS.

1. Perception awakened.
2. Consciousness of the idea and formulation in words.
3. Knowledge of typical activities or qualities.
4. Deepens idea of individual object.
5. Exactitude in reproduction.
6. Develops type.

EXPLANATION.

Point 1. By beginning our exercise with an activity we attract and hold the child's attention and secure his interest upon the single activity, which is set up in contrast to the many which constantly engage him from time to time; through his interest a perception of the activity is awakened and a basis thus secured for the growth of a definite idea.

Point 2. By telling what has been done the eye is led to observe and the mind led to concentrate, which results in a conscious knowledge of the particular action through the formulation.

Point 3. By telling what other things have the same activity leads to illustration of the single activity, exercising the faculty of comparison by searching for resemblances, also exercises the power of recognition and prepares for classification.

Point 4. Deepens the knowledge of the individual object by discovering new possibilities and results in arousing the faculty of investigation.

Point 5. Making the object tests the clearness of the child's knowledge as well as his ability to execute, revealing the limitation of his power and creating a desire for exactitude in reproductions.

Point 6. Transforming into other objects forms the habit of searching for the typical form under various modifications, and creates a desire to invent new forms from the already known form.

FIRST GIFT OUTLINE.

I. Description of the gift.	II. Salient Characteristic of the gift.
III. Relationship in the sequence of gifts.	IV. Practical purpose of the gift.
V. Relationship to the child.	

I. The First Gift consists of a set of six soft, woolen balls, with strings attached, each ball having one of the normal colors of the spectrum, red, orange, yellow, green, blue, violet.

II. The Salient characteristics of the First Gift, are simple unity and ready movability.

III. The First Gift forms the starting point in the sequence of gifts; containing as it does, all the universal qualities, without emphasizing any one, a basis is thus laid for a progressive knowledge of these qualities, as the child moves out of his general experience with the first gift into more particular experiences with objects more definite and restricted in their nature; the contrast which exists in color results in defining the form of the ball, while the contrast between straight and curved illustrated by ball and string results in laying a basis for classification of solids bounded by curvilinear and rectilinear surfaces.

IV. The practical purpose of the gift is to awaken and utilize the observation of the child, by leading him to gather up his various experiences and become measurably conscious of them by an attempt to express them; in the first stage this self-expression takes the form of an indefinite activity, which is gradually made over into a definite and conscious experience through the avenue of suggestive words which explain the activity.

V. The gifts being designed to meet the needs of the child at characteristic stages of his development, it follows that each gift must in a manner correspond to the condition of the mind at the stage for which it is intended; the First Gift reflects the unity of the child's mental condition, by the simple unity of its form; also, the instinctive activity of the child by its ready adaptability to motion. Through manifold experiences with the first gift, the power of recognition is developed and the child is led to view the external world apart from himself.

CHARACTER OF FIRST GIFT EXERCISES.

The keynote of the First Gift exercises being activity, the child is readily attracted to and interested by them, so the kindergartner finds the First Gift invaluable in helping her to bring about that absence of self-consciousness which is the forerunner of spontaneous self-expression, without which she cannot arouse the faculties to that voluntary action which is so greatly emphasized by Froebel.

The exercises are arranged so as to include the daily life-experiences with which the child is familiar in an accidental and transitory fashion, but which are now presented in a definite manner, and repeated under various conditions until some impression of the underlying quality has been made; the presentation always takes on the sympathetic form and the threefold appeal to Feeling, Thought and Will is made through Melody, Word and Gesture.

The exercises illustrate noticeably the following general ideas:

- I. Movements of natural objects.
- II. Motions connected with inanimate objects.
- III. Color in objects.

I. DIVISION.

Under this division would be included all the sympathetic songs which attract attention to the life in Nature; activities, of birds, being emphasized.

II. DIVISION.

Includes songs which illustrate moving wheels, bells, pendulum, rolling balls.

III. DIVISION.

Includes songs which illustrate color in birds, fruits, flowers.

SUGGESTED EXERCISES.

In giving exercises with the First Gift it is well to maintain one dominant idea throughout the exercise, as children are prone to confuse the symbolic terms employed, and thus gain false impressions through too rapid change from one idea to another.

Very little word analysis should be given to the younger children, but they should be encouraged to formulate simply, the activities which engage them; however, it is not well to stop in the middle of a song-sequence to ask questions, as it breaks the logical connection and tends to divert the attention; after concluding the following set of songs, questions might be asked about the nest and its fitness for the birds, its location, and leading out from this a short talk upon the varieties of nests, would interest the children, and tend to leave a definite impression upon their minds.

EXERCISE No. 1.

Dominant idea—Bird life; attention attracted to the nest as the home of the bird, with a view to giving a sense-impression of the form of the ball, by concentrating observation upon it.

Just see our nice, warm nest,
Where the baby birds may rest;
Until they learn to hop and fly
To take good care of them, we'll try,
So here we will let them stay
Until they learn to fly away.

Up in a large, green tree,
Far from the ground, you see;
The mother robin builds her nest,
A cherry tree she likes the best.
There are plenty cherries, you see
For the robins, and you and me.

"Now take this little ball," page 67, "Merry Songs and Games."

2. "Hush-a-bye birdies,
I'll sing you a song;
One that is sweet and not very long;
Peep, peep, go to sleep,
Peep, peep, go to sleep."
3. "Hush-a-bye birdies,
I'll sing you to rest,
Nothing shall harm you safe in your nest,
Peep, peep, go to sleep,
Peep, peep, go to sleep."
4. Rock-a-bye birdies on the tree top,
When the wind blows the cradle will rock,
And the birds sleep so snug in their nest;
While their mothers keep watch o'er their rest.

Tune, page 69, "Merry Songs and Games."

5. "Sleep, birdies, sleep, thy mother watch will keep,
The stars are shining high up in the sky,
The moon is quietly watching nigh,
Sleep, birdies, sleep."
6. And, now, while the birdies rest,
Each in his own little nest,
We'll softly put each one away,
Then again some other day,
We'll all together play
A happy, happy play.

Tune, page 67, "Merry Songs and Games."

EXERCISE No. 2.

Dominant idea—Progressive development of the activity of the bird; after finishing the song-sequence, draw from the children, in story form, the successive steps in the growth of the bird.

1. Repeat the first nest song of Exercise No. 1.
2. "The little bird hops in its nest, so cozy and so warm,
It tries to do its very best in sunshine and in storm."
3. "The little bird hops *out of* its nest, so cozy and so warm,
It tries to do its very best in sunshine and in storm."
4. The little bird hops back to its nest, so very tired is he.
And cuddles down to take a rest up in this shady tree.
And then his wings will be strong enough to fly away, you see.
5. Fly little bird up, up so high,
Where the sunbeams live in the bright, blue sky,
When you are sleepy, fly back to your nest,
And we'll sing you a song while you sweetly rest.

Tune, page 83, "Merry Songs and Games."

6. "O, fly little birds on the hill-top, fly away,
We love to see you gaily flying day by day,
But soon you will come back to your mother's nest,
She'll keep you safe from every harm and give you rest."

Tune, "My Song I Sing," "Merry Songs and Games."

7. Birds fly up, birds fly down,
Birds go hopping all around;
Birds fly up, etc., repeat.

Tune, "Skating Song," "Merry Songs and Games."

8. "We birds we are a merry set, we hop and fly together,
Our merry tunes cheer up the world,
They sound through field and meadow."
(One-half the balls, for hopping birds, the other half for flying birds.)
"So happy and so free we are, we find what gives us pleasure;
Prepared for us, we find our fare, and in no scanty measure.
And when we have passed a cheerful day,
We nestle in the bushes,
And dream sweet dreams as we slumber still
Till morning early blushes."

EXERCISE No. 3.

Rolling Games.

Dominant idea—Rhythmic motion; development of conscious concentration of attention.

1. "Roll over, come back here, so merry and free,
My play-fellow dear, who shares in my glee!"
2. One, two, three, now you see,
Balls roll over, light and free;
One, two, three, now you see,
Balls roll over, light and free.
3. "Six little balls on the table, I see,
Bright and soft as balls can be:
If your aim shall be quite true,
Then we all will clap for you."

Tune :

4. 1, 2, 3, roll—vary counting so as to hold attention to the word "roll."
1, 2, 3, roll,

EXERCISE No. 4.

Dominant idea—Circular motion.

1. "Round and round it goes, as fast as water flows,
The dripping, dropping, rolling wheel
That turns the noisy, dusty mill,
Round and round it goes, as fast as water flows."

2. "See the water wheel, how it goes,
While the water swiftly flows,
Always turning round and round,
Never idle is it found."
3. "See the windmill, how it goes,
While the wind so briskly blows;
Always turning round and round,
Never idle is it found."
4. "See the ball go round and round
Like the wheel upon the ground."
Always turning round and round,
Like the wheel upon the ground
5. "Move quickly round and round, like a wheel upon the ground,
And as thus round and round you move,
You're still the little ball I love,
Move quickly round and round,
Like a wheel upon the ground."

EXERCISE No. 5.

Dominant idea—Active presentation of the idea of direction.

1. A ball on the table there, I *take* in my hand right *here*,
Balls of yellow, red and blue
Some for me and some for you,
I hold mine in my hand, and quite still let it stand.
2. "Now, let your soft ball rise, up, upward to the skies,
Trees and flowers all things below, upward, upward try to grow,
Now let your soft ball rise, up, upward to the skies."
3. "Bell high in the steeple,
Calls to church the people,
Ding, dong, ding, dong, ding, dong bell."
4. "From front to back now swing, you pretty little thing.
Like the church bell slowly ring.
Ding, dong, ding, dong, ding, ding.
From front to back now swing, you pretty little thing."
5. "Now swing from left to right, while I the string hold tight,
The pendulum moves thus you know,
Tic, tac, it says, not fast, not slow,
Now swing from left to right, while I the string hold tight."
6. "Now, dear little friend, our play is at an end,
Since we have done our very best, we now will take a nice long rest,
And on another day, again together play."

EXERCISE No. 6.

Dominant idea—Attraction to and observation of color in fruits.

1. We all are little market men, with fresh, ripe fruit to sell.
And if you'll come and buy of us, we'll surely treat you well.
Ripe cherries, ripe cherries, ripe cherries to sell,
Ripe oranges, ripe oranges, ripe oranges to sell:
Yellow lemons, yellow lemons, yellow lemons to sell:
Green apples, green apples, green apples to sell:
Blue plums, blue plums, blue plums to sell;
Ripe grapes, ripe grapes, ripe grapes to sell,
O! come and buy of us we'll surely treat you well.

The children take up the refrain in order, holding up the balls which correspond in color to the fruits as they sing about them; all join in the last line; then choose one child to sell several of the same kind, the children putting them away as they receive them; after all are sold different children find them, thus developing observation and memory.

EXERCISE No. 7.

Dominant idea—Color in birds.

1. I'm a red bird, a red bird, and the whole winter long,
In the far-away south, I sing gaily my song;
And my neighbor, the oriole, hangs her nest up so high
Where the soft winds are blowing, a sweet lullaby.
2. And this is a canary, a bright little bird,
Who sings sweetly and softly, I know you have heard;
And here is the parrot, from over the sea,
Where the orange tree blossoms his home used to be.
3. See the blue bird, the blue bird, so early in spring,
From trees that are leafless, his song he will sing,
And the last is a pigeon with a violet ring,
Which he wears round his neck and he shows in his wing.
4. We are birdies, we are birdies, so fearless and true,
We are happy, we are happy be the skies dark or blue,
Like us little children be happy and gay,
If sunshine or shadow come over your way."

(Adaptation of the six bird songs in "Merry Songs and Games.")

EXERCISE No. 8.

Dominant idea—Color in flowers.

1. My ball is like the red, red rose,
Mine like the nasturtium when it blows,
Mine is like the buttercup light,
Mine, like the leaf so green and bright;
Mine is like the cornflower blue,
And mine like the violet, sweet and true.

SECOND GIFT OUTLINE.

I. Description of the Gift.	II. Salient characteristic of the Gift.
III. Relationship in the sequence of Gift.	IV. Practical Purpose of the Gift.
V. Relationship to the Child.	

I. The second gift consists of a sphere cylinder and cube, upon which are fastened eyelets so that strings may be inserted for use in the twirling games.

II. The salient characteristic of the gift is the variety in form which is presented, thereby attracting attention to differences rather than to resemblances; the mediation of the contrasts in form suggests the possibility of the connection of all objects.

III. The Second Gift connects with the First Gift through the quality of form, the sphere suggesting the ball, but this gift makes an advance, by the introduction of two entirely new forms, cylinder and cube, thereby demanding the conscious use of the power of comparison in distinguishing between the several objects, and detecting differences rather than resemblances. The introduction of the cube points forward to the Third Gift and the change of form produced in the twirling games suggests the idea of change as a permanent feature in the succeeding gift.

IV. The Second Gift offers the three typical forms as bases for the classification of external objects, and by stimulating the power of comparison through thus presenting striking contrast the child is led to recognize the type-form under any modification which he perceives. The three separate and distinct objects are connected through the mediation of their contrast; the sphere and cube, united by the cylinder which contains qualities similar to both, thus apparent separation is resolved into a unity and the child led to seek for a relationship between two extremes in the mediation which connects them.

V. The child, having been led through the use of the First Gift to separate and hold apart from himself, the external world, it now becomes necessary that he shall consciously separate the objects of this external world from each other, in order to properly classify them. The Second Gift constantly demands the exercise of the power of comparison, and thus increases the observation and power of concentration by defining the child's experiences of form.

SUGGESTED EXERCISES.

A connection with the First Gift should be established, first, through the avenue of activity, by repeating the motion exercises of the ball with the sphere; such as the rolling games, the wandering game and some of the swinging games; the child is then prepared for a connection through observation and comparison of qualities.

EXERCISE No. 1.

1. "Roll over, come back here, etc."
2. 1, 2, 3 roll; 1, 2, 3 roll, etc.
3. "In a straight line the little sphere,
Rolls over there and comes back here."
"In a straight line the sphere rolls along,
Singing for each a little song."
4. "A sphere I am wherever I go,
How'e'er I turn, myself I show."
5. "A sphere is in my hand, you see,
And where the sphere is the cube cannot be."

EXERCISE No. 2.

1. Sing 1, 2, 3 roll, letting children roll sphere against the face of cube, thereby attracting attention to it in an active way; after rolling and striking several faces of the cube, put spheres away and sing:

1. "Be quiet, little cube, it is my will
That you should stand quite still, quite still;
The cube now is resting upon its flat face,
And standing so firmly it can't lose its place."
2. "The cube can not stand on edge,
It tumbles there and tumbles here;
See how it stands and does not fall
When it leans against a wall."
3. "How nicely on one point I stand,
When steadied by your little hand;
Now look and you will quickly learn
How well upon one point I turn."

Through this exercise the stability of the cube is emphasized in contrast to the moveability of the sphere, and having represented these two contrasting ideas to the child, the cylinder should be introduced in an exercise combining both moveability and stability.

EXERCISE No. 3.

Rolling games with the cylinder.

1. "Roll over, come back here, so merry and free,
My playfellow, dear, who shares in my glee."
2. "See the cylinder roll along,
Singing for each a little song."
3. "Be quiet, my cylinder, it is my will,
That you should stand quite still, quite still;
The cylinder is resting upon its flat face,
And standing so firmly, it can't lose its place."
4. We will roll them together, little playmates, you see,
And the children all may share in their glee. (Sphere and cylinder roll together.)
5. Now for these two little friends, it is my will,
That they should stand quite still, quite still,
And quietly resting, each on a flat face,
They both stand so firmly they can't lose the place. (Cylinder and cube stand together.)

EXERCISE No. 4.

Permanency of form of the sphere established through variety of motion.

1. "Round I run when in a plate, (have plate to illustrate idea)
On the table I go straight;
Move your hand and bid me go,
Strict obedience will I show;
Let me rest, or run, or roll,
Make a bell of me to toll,
Swing me there or twirl me here,
Always I am your little sphere."
2. If you twist up a string and spin me around
A little sphere I shall always be found.
Tra la, la, etc.

EXERCISE No. 5.

Twirling cube to emphasize change in form; cube changes every time it spins.

1. "With a string through my face, I rapidly run,
My eight little corners delight in the fun;
To you they are hidden, but there they remain,
And when I stand still, you will see them again."
2. "Put a string through my edge, and give me a twirl,
And then round and round in a circle I'll whirl."
3. "And last, but not least, like a top I am found,
If with a string through my edge you spin me around."

EXERCISE No. 6.

Twirling cylinder to show the mediation; it remains the same when spinning one way and changes when spinning the other two ways

1. "If on my flat face you turn me around,
A cylinder still, I shall surely be found."
2. "If on my curved face you spin me, you'll see
What a nice little sphere is hidden in me."
3. "Put a string through my edge and spin me around,
And a nice little top in me will be found."

EXERCISE No. 7.

Discovery of the separate parts of the cube; (faces) after singing faces may be located.

1. "Nothing but two hands I see,
Where can the quiet little cube be?"
2. And now I've found one little face,
I am sure every one is in its place.
3. "Of the cube two faces I see,
Where can the other faces be?"
4. "Now count the faces, one, two, three,
More at one time you can not see."
5. Now count *all* the faces, one, two, three,
Four, five six, now this is all you see.

EXERCISE No. 8.

Discovery of corners.

1. "Here is one corner, where are the others?
Ask your little sisters, ask your little brothers."
2. "Here are two corners," etc.
3. "Here are three corners," etc.
4. Count the corners above, one, two, three, four,
And now do you think you can find any more?
5. Here are four corners, where are the others?
You'll find four below, say your little brothers.
6. And now all the corners I am sure we can show,
Four above and four below.

EXERCISE No. 9.

Discovery of edges. Use same songs as in Exercise No. 8, substituting the word "edge" for "corner." Use songs 1, 2, 3, 4, 5.

6. Although we've found eight, I am sure there are others,
They are straight up and down, say your little brothers.
7. Four edges above and four below,
And four up and down, this is *all*, I know.

EXERCISE No. 10.

Defining parts of cylinder.

1. "Nothing but two hands I see,
Where can the little cylinder be?"
2. Only one curved face I see,
Two others are flat, and these make three.
3. No corners on the cylinder, I see,
But two curved edges, as round as can be.

SUMMING UP.

Sphere—Moveability.

Cube—Stability.

Cylinder—Moveability and stability.

Sphere—Form the same at rest and in motion.

Cube—Form changes in every motion.

Cylinder—Form the same in *one* motion, changes in two motions.

Sphere—Has *one* curved surface, no corner, no edges.

Cube—Has many flat faces, many corners, many edges.

Cylinder—Has one curved face, two flat faces, no corners, two edges.

Music for First and Second Gift Songs found in "Merry Songs and Games."—Mrs. Hubbard.

GENERAL OUTLINE BUILDING GIFTS.

I. Description of the Gift.	II. Salient Characteristics of the Gift.
III. Relationship in the Sequence of Gifts.	IV. Practical Purpose of the Gift.
V. Relationship to the Child.	

I. The building gifts are four in number and consist of cubes divided into parts; the divisions are at first simple and the parts few in number, but the complexity in number of parts and quantity of material increases as we advance, while they offer progressively, more subtle contrasts in qualities.

II. The salient characteristic of the Building Gifts is the illustration of organic unity which is kept before the child by the emphasis placed upon the necessity for using every part of the gift in each new whole which he creates, thus keeping up the vital relationship between part and whole.

III. The Building Gifts connect with the Second Gift through the form of the cube, and realize, as a permanent feature, the idea of transformation, which was foreshadowed by the twirling games; by the constant presentation of the universal qualities, form, size, number, position, direction, they prepare for the conscious use of the separate elements of the third set of gifts, wherein the child must create wholes according to an inner sense of unity.

IV. The practical value of the Building Gifts lies in the fact that they gratify the instinct of investigation, and direct what would otherwise be a destructive tendency into a constructive channel; hence, it is at once apparent that the emphasis should be placed upon the building exercises and the opportunity to give the child fundamental perceptions of form, size, number, position, direction, should be secondary in importance to the development of the creative activity.

Accurate experiences with these universal qualities, however, in the construction of forms, leads to the formation of accurate ideas of these qualities, through the awakening of correct perceptions in regard to them.

V. The Building Gifts meet two very strongly marked tendencies of the child:

1st—The tendency to investigate.

2d—The tendency to transform.

In the first stage of development the child was satisfied with the external appearance of objects, but as he begins to assimilate the experiences gained from contact with the external, he manifests a desire to understand them and to search for a cause which shall explain the appearance and frequently destroys the outer form in an effort to comprehend the inner condition.

The nature of the Building Gifts renders it possible for him to penetrate the outer, visible form, by separating and transforming into a new whole, after which he may reconstruct the original form and find it uninjured by the change.

ORGANIC UNITY.

In considering the subject of Organic Unity in connection with the Building Gifts, an organism may be defined under the following heads:

I. An organism is a whole composed of parts, each part dependent upon each other and upon the whole, *i. e.:*

An object complete, yet dependent for its completion upon the parts which go to make it up; organisms will be of a lower or higher order, according to the variety of parts of which they are composed. The word organic is suggestive of the animate world as opposed to the inanimate, but does not necessarily imply life, in the plant or animal sense, hence an object, institution, organization or a system may be correctly termed an organism.

II. The life of the whole pervades each part, *i. e.:*

The vital element upon which the organism depends for its existence must go into every individual part of it in order to preserve harmony and promote unity. In the plant, this element is the life giving sap, in the animal, the vitalizing life fluid which circulates throughout the body; in an institution or organization, it is the dominant idea upon which it is based and which it is intended to further.

III. Each part is an end in itself and a means to an end, *i. e.:*

The parts of an organism have a distinctive individuality and purpose, which they separately fulfill; the leaf uses up the vital force which it receives in shaping itself into a complete leaf; but each part also serves as a means toward promoting the final development of the aggregate whole, so that every leaf also serves to present a surface for moisture absorption and to furnish shade for the roots, which prevents too rapid an evaporation of moisture from the ground.

IV. The universal is found in the particular and the particular in the universal, *i. e.:*

Every class or species has its own peculiar characteristics, whereby it may be recognized as belonging to a certain class. These general characteristics repeat themselves (with more or less modifications) in every special object which belongs to the class, so that we may know its class by recognition of the universal elements in the particular object. On the other hand, a knowledge of the characteristic qualities of the special object enables us to recognize the particular qualities in the class as a collection, thus finding the particular in the universal.

We may illustrate this point by considering the Trades World as an organism composed of a number of individuals forming a community which ministers to humanity at large, from the standpoint of physical necessities, hence we may expect to find pervading this organism, general characteristics, which represent the universal qualities of the class as a whole; for example, the manual labor, the muscular strength, the matter of exchange of commodities, marks the institution of civil society. These universal qualities repeat themselves again in the particular tradesman, and assign him as an integral part of the trades' world, thus is the universal found in the particular while the presence of these general characteristics in

the individual so stamps him that we may recognize the similar qualities in the class at large after an acquaintance with them in the individual, thus finding the particular again in the universal.

V. Ideal Type.

Every organism is in a measure a type of the class to which it belongs, inasmuch as it presents the qualities which the class universally possesses.

The organism which would present the ideal type of its class would be the one which embodied in itself these universal qualities in an approximately perfect degree, and which would, therefore, create in the mind a typical conception which would enable the individual to recognize the type underlying manifold modifications such as would be found in the world about him, *i. e.*, we should select as the typical oak, a tree having the essential characteristics of the oak family, well defined, so that the mind would receive a definite impression of these characteristics, and thus be enabled to recognize the oak tree under various modifications which climate and soil would produce; however, the *ideal* type would be created by the mind from a deduction of its observations of a number of objects belonging to a certain class and would become a standard to which they might all be related.

CHARACTER OF BUILDING GIFT EXERCISES.

The Building Gifts are essentially adapted to the production of architectural forms, and while forms of beauty are possible they are not to a high degree artistic, because of the restrictions, imposed by the nature of the material.

The exercises with the Building Gifts fall under three distinct heads:

1. Forms of life.
2. Forms of beauty.
3. Forms of knowledge.

The forms of life are valuable because they appeal strongly to the sympathies of the child, and thereby hold his interest; they develop the observation in regard to the familiar objects which surround him and thus develop accuracy of form and ideas of proportion and balance.

Forms of beauty emphasize the law of opposites as the basis of true balance and develop a sense of symmetry in construction.

Forms of knowledge attract attention to geometric forms and to the relations of lines, angles, surfaces and solids, showing the relation of geometric forms to artistic production, by giving the child ideas of definite forms which he may consciously use in producing symmetrical figures.

OUTLINE THIRD GIFT.

I. Description of the Gift.	II. Salient Characteristics of the Gift.
III. Relationship in the Sequence of Gifts.	IV. Practical Purpose of the Gift.
V. Relationship to the Child.	

I. The Third Gift is a two-inch cube divided equally once in each dimension, producing eight small cubes.

II. The salient characteristic is the contrast in size, which results in impressing the form *cube* upon the child's mind, the eight small cubes repeating the qualities contained in the large cube and differing from it in size only.

III. In the Third Gift the transition is made from the undivided to the divided solid, and the connection is maintained through the form of the cube. It introduces the organic principle in contrast to the inorganic principle of the first two gifts, and realizes the idea of change (in its sequences of forms) hinted at in the Second Gift. When separated into its parts it foreshadows the elimination of the dimension, thickness, by a slight approximation to surface; as the first of the Building Gifts it illustrates a simple form of organism because it shows so little variety in the parts.

IV. The practical value of the Third Gift lies in its possibility of easy manipulation, satisfying the child's desire to transform without requiring great technical skill, also in the suggestiveness of the material which renders it possible for him to produce objects with which he is familiar, by slight transitions; analytically, it offers the cube, square prism, oblong prism or rectangular parallelopiped, also the square and oblong in a variety of sizes and positions, as different objects are produced.

V. The Third Gift is intended to meet the necessities of the child at the stage when he is no longer satisfied with the mere appearance of things, but seeks to know how they came to be; he thus begins to realize the many possibilities of the same element, and puts forth his constructive powers in an effort to produce new and varied wholes, when provided with a gift which readily lends itself to his transforming activity.

CHARACTER OF THIRD GIFT EXERCISES.

With the use of the Third Gift we note a marked elimination of the song element and a corresponding emphasis upon the individual creative activity, which seeks to express outwardly the impressions which have been received through observation of surrounding objects, said impressions having been modified by the individual stamp of the child's mind.

In connection with the development of the constructive ability, a progressive analysis of the constantly recurring universal qualities is kept up, so that the child masters qualities as well as quantities of material. Language is developed through the word formulation which is required of him, in making correct statements of his activities, also in telling of objects which resemble his gift in the quality emphasized.

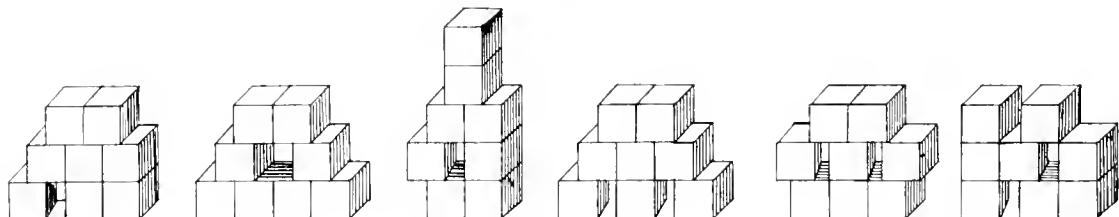
SUGGESTED EXERCISES.

EXERCISE No. 1.

Dominant idea—To attract attention to the divisions and to the possibility of separation into parts, with a view to fostering and directing the desire to construct.

Place a Third Gift before each child and a Second Gift cube in the middle of the table; notice the fact that the box resembles the cube. Take out cube in an orderly manner. Is the new cube just like the old one? How does it differ? It has lines on the faces. Can any one think of some way to take this cube apart? Watch for the child who lifts the top, and have all the others do likewise. Who can change it again? Watch for the child who separates into four parts and have others do likewise. Now let some one discover the separation into eight parts, and the others do likewise. Now we have taken it all apart, we will count how many: Count 1, 1, 1, 1, 1, 1, 1, 1 many; then 1 and 1 and 1 and 1 and 1 and 1 and 1 are many, then 1, 2, 3, 4, 5, 6, 7, 8. All pile the little blocks up as high as you can; show above on post, then below; take down four, place to the right side, making a door; take down four again, place in front, making cube; five minutes for free building during which ask different children to show face above on a form then below.

EXERCISE No. 2.



Life Forms.

Houses, showing windows and doors foreshadowing enclosure of space in the Fourth Gift.

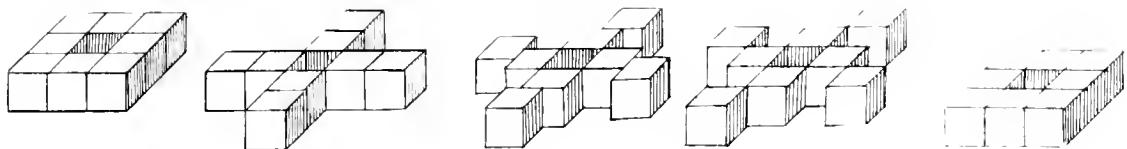
EXERCISE No. 3.



Life Forms Emphasizing Balance.

1. Mantel, fireplace and clock.	2. Arch.
3. Log Cabin.	4. Church. (Side view.)
5. Church. (Side view.)	6. Boat. (Gondola.)

EXERCISE No. 4.



FORMS OF BEAUTY.

ANALYTIC EXERCISES.

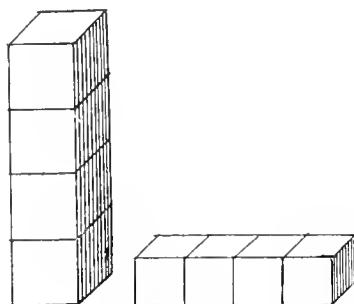
The previous exercises are intended to develop the constructive powers of the child and would admit of very little analysis; the following will show the analytic possibilities of the Third Gift with regard to the universal qualities.

FORM.

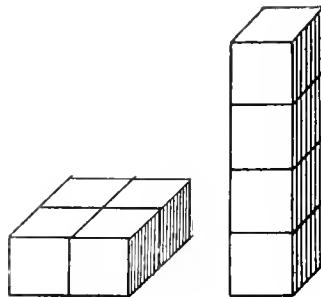
Attention is directed to the square faces initially by placing the hand upon them in locating each one; when forms are made having only two square faces, these are found also and attention drawn to the unlike faces, which furnishes the contrast in form by which the child is enabled to abstract the square form. Through a gradual process in the exercises, the square is defined by observations of it, in a variety of positions and in a variety of sizes, so that the child recognizes it under any condition. With the defined experience of the square as a basis we proceed to define the oblong by comparison with the already known square, and when the child is able to recognize these two surface forms regardless of size or position he is ready to master the relationship of several squares and oblongs in the solid square prism and oblong prism, or parallelopiped and to find out that the bases must be equal polygons, lying in parallel planes, and that the lateral faces must sustain a given relation to the bases.

These solids are presented to the child in a great variety of sizes and position in order to develop recognition of the quality of form, independently of the other qualities which aid him in abstracting the one quality emphasized.

WAYS TO COMPARE SQUARE PRISMS.



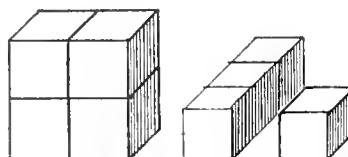
1. Compare two alike in size and form but placed in different positions.



2. Alike in size, different in form.

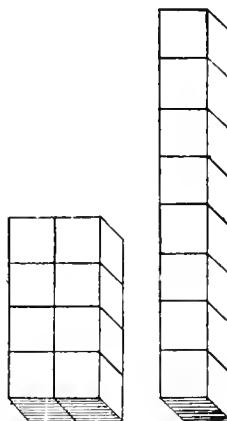


3. Alike in form, different in size.



4. Different in form, different in size.

FORMS OF KNOWLEDGE.



Comparison of square prism and oblong prism or parallelopiped. Find the two faces which are alike on post: Where are they? Above and below. What kind? Square. Are they the same size? Yes. How many oblong faces? Four. Where are they? Front, back, right, left. Place post in a lying position on the table; does it change any of the faces? No, the square faces are still opposite, and the oblong faces still connect them. Analyze the second form in similar manner, after which let the children try to reproduce these forms in different sizes.

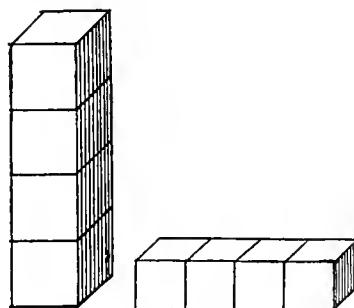
SIZE.

Size implies space filled; the child will gain clear impressions of the quality size by having his attention drawn to it in connection with form and position.

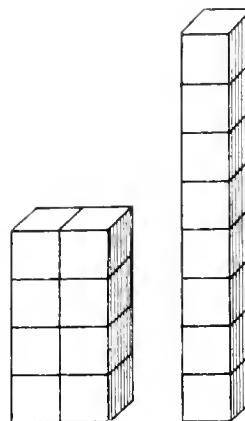
1. Similar size, similar form, similar position.



2. Similar size, similar form and dissimilar position.



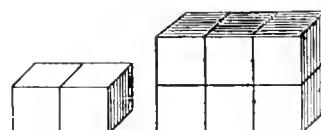
3. Similar size, similar position, dissimilar form.



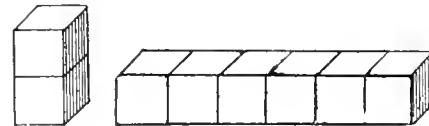
4. Dissimilar size, similar form and similar position.



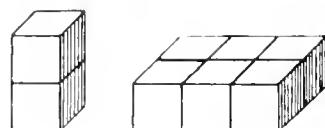
5. Dissimilar size, dissimilar form, similar position.



6. Dissimilar size, dissimilar position, similar form.



7. Dissimilar size, dissimilar form, dissimilar position.



NUMBER.

The number possibilities of the Third Gift may be indicated to the child by various arrangements of the cubes. Make 8 in different ways.

1. Parts equal:

4 and 4. 2 and 2 and 2 and 2.
1 and 1 and 1 and 1 and 1 and 1 and 1.

2. Two parts unequal:

1 and 7. 2 and 6. 3 and 5. 5 and 3. 6 and 2. 7 and 1.

Three parts unequal:

1 and 2 and 5.	2 and 1 and 5.	5 and 2 and 1.
1 and 3 and 4.	3 and 4 and 1.	4 and 3 and 1.
1 and 4 and 3.	4 and 1 and 3.	3 and 1 and 4.
1 and 5 and 2.	5 and 1 and 2.	2 and 5 and 1.

Two parts equal, 1 part unequal:

1 and 1 and 6.	6 and 1 and 1.	1 and 6 and 1.
2 and 2 and 4.	4 and 2 and 2.	2 and 4 and 2.
3 and 3 and 2.	2 and 3 and 3.	3 and 2 and 3.

Four parts:

1 and 1 and 1 and 5.
2 and 1 and 1 and 4.
3 and 1 and 1 and 3.
4 and 1 and 1 and 2.
5 and 1 and 1 and 1.

Five parts:

1 and 1 and 1 and 1 and 4.	3 and 1 and 1 and 1 and 2.
2 and 1 and 1 and 1 and 3.	4 and 1 and 1 and 1 and 1.

Six parts:

1 and 1 and 1 and 1 and 1 and 3.
2 and 1 and 1 and 1 and 1 and 2.
3 and 1 and 1 and 1 and 1 and 1.

Seven parts:

1 and 1 and 1 and 1 and 1 and 1 and 2.
2 and 1 and 1 and 1 and 1 and 1 and 1.

Addition:

$$\begin{aligned}
 1+1+1+1+1+1+1 &= 8 \\
 2+2+2+2 &= 8 \\
 2+2=4, \quad 4+2=6, \quad 6+2=8.
 \end{aligned}$$

Subtraction:

1 from 8 leaves 7.
2 from 8 leaves 6.
3 from 8 leaves 5.
4 from 8 leaves 4.

5 from 8 leaves 3.
6 from 8 leaves 2.
7 from 8 leaves 1.
2 from 8 leaves 6.

2 from 6 leaves 4.
2 from 4 leaves 2.
2 from 2 leaves 0.

Multiplication:

$8 \times 1 = 8$.
 $4 \times 2 = 8$.
 $2 \times 4 = 8$.
 $2 \times 2 = 4$. $3 \times 2 = 6$. $4 \times 2 = 8$.

Division:

8 ones in 8.
4 twos in 8.
2 fours in 8.

Fractional Divisions:

2 halves = 1 whole.
4 quarters = 1 whole.
8 eighths = 1 whole.

2 quarters = 1 half.
2 eighths = 1 quarter.
4 eighths = 1 half.

POSITION.

One point in position (faces).

Positions emphasized are above, below; front, back; right, left.

Two points in position (corners):

2. Above in front.	2. Above at the back.
2. Below at the back.	2. Below in front.

Three points in position (corners):

1. Above in front on right side.	1. Below at the back on left side.
Above in front on left side.	Below at back on right side.

Above at the back on right side.	Below in front on left side.
Above at the back on left side.	Below in front on right side.

DIRECTION.

This quality is emphasized in connection with edges.

4 edges straight up and down.	
4 edges from left to right.	
4 edges from front to back.	

Build post with long edges up and down; change it so that long edges will be from front to back; change again so that long edges will be from left to right.

Build a wall with longest edges from left to right, shortest edges from front to back and medium edges up and down.

Change the position so that longest edges will be up and down, shortest edges from front to back and medium from left to right.

FOURTH GIFT OUTLINE.

I. Description of the Gift.	II. Salient Characteristics of the Gift.
III. Relationship in the Sequence of Gifts.	IV. Practical Purpose of the Gift.
	V. Relationship to the Child.

I. The Fourth Gift is a two-inch cube, divided once vertically and three times horizontally, producing eight parallelopipeds, each of which is two inches long, one inch broad, one-half inch thick.

II. The Salient Characteristic of the Fourth Gift is the difference in dimension in the parts, which results in defining length, breadth and thickness; it also illustrates a nearer approximation to surface; (2) Enclosure of space, the material illustration of the value of boundaries in defining form and contents; (3) Balance, the material illustration of the value of proportion; (4) Communicated motion, the material illustration of the value of concentrated activity.

III. The Fourth Gift is the second building gift and by the introduction of variety in the parts represents a higher organism than the preceding gift; it emphasizes the same forms as the Third Gift, and divides into the same number of parts, yet the variety occasioned by the difference in dimension gives rise to new presentations of form and number; it prepares for the use of the Fifth Gift by developing dexterity in handling and keen observation in detecting differences in dimension. It suggests the realization of surface by the forms which show only a part of the object, such as house fronts, etc.

IV. The practical purpose of the gift is to stimulate greater constructive power, supply material adapted to produce more perfect forms, and to deepen the ideas of form, size, number, position, and dimension, by presenting them in new combinations.

V. The Fourth Gift continues to hold the child's interest in organic wholes and affords better opportunities for transforming the original whole into new forms, showing more detail than those of the Third Gift, while, at the same time, the amount of material is not increased, he thus receives material which furnishes new possibilities without demanding too great concentration of effort to produce its forms.

CHARACTER OF FOURTH GIFT EXERCISES.

The emphasis, as in all the building gifts, should be upon the constructive element, but the special features of the gift should be developed in the exercises; through its variety it is possible to intensify by more varied illustration, the universal qualities which were found in the Third Gift, and the child will be able to formulate more definitely his concrete experiences.

In *form* there is no advance, but emphasis is placed upon the oblong which is defined more completely by contrast in its dimensions.

In *number*, there is a slight advance in the introduction of the half-inch, which admits of new combinations in counting.

In *size*, there is a greater variety of contrasts.

In dimension, there is great variety, and the gift affords manifold opportunities for definite experiences with the ideas of length, breadth and thickness.

Position is more definitely defined through the variety in size.

The exercises should develop the ideas of dimension, approximation to surface, enclosure of space, balance, communicated motion.

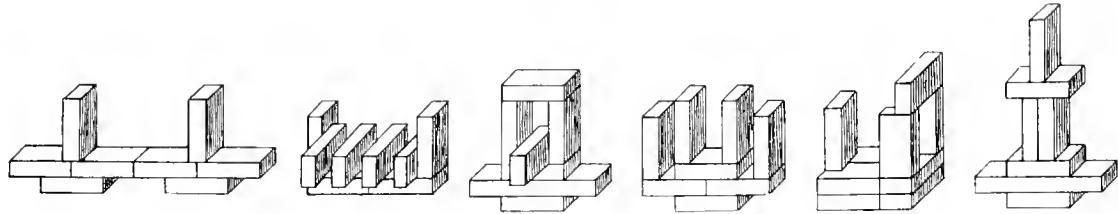
Free building should be allowed frequently, the child often gaining control of the material more readily, when he is not conscious of the necessity for handling it well, and the power thus gained may be utilized in exercises where it is desirable to have the children carry out some special idea.

In giving the child experiences in dimensions decide upon some definite rule in the matter of which direction you shall designate as length,—which breadth. If you accustom them to calculate the left to right distance as length, then front to back is breadth in reference to yards, parks, etc., while fences are long, *high* and thick, and wells are long, broad and deep. Doors and windows are high and wide.

SUGGESTED EXERCISES.

BATTLESHIPS.

Life Forms.



ENCLOSURE OF SPACE.

I Set. Enclosures attracting attention to square contents, such as yards, parks.
II Set. Enclosures attracting attention to divisions of a surface, such as doorways, windows in fronts of houses.

EXERCISE No. 1.

Make a fence around a square yard. Around an oblong yard, around a three-sided park; around an eight-sided park. Add together the length of sides; find out square contents by counting the squares enclosed, in first two forms.

EXERCISE No. 2.

Give problems in space enclosure according to dimension.

I. (Inside Dimensions.) Enclose yard 4 inches long, 4 inches wide; fence 1 inch high, $\frac{1}{2}$ inch thick.

II. (Inside Dimensions.) Enclose yard 6 inches long, 2 inches wide; fence, 1 inch high, $\frac{1}{2}$ inch thick.

III. (Inside Dimensions.) Enclose yard 2 inches long, 2 inches wide; fence 2 inches high, $\frac{1}{2}$ inch thick.

IV. (Inside Dimensions.) Enclose well 1 inch long, 1 inch wide; sides 4 inches deep, $\frac{1}{2}$ inch thick.

V. (Inside Dimensions.) Enclose well $\frac{1}{2}$ inch long, $\frac{1}{2}$ inch wide; walls 4 inches deep, $\frac{1}{2}$ inch thick.

EXERCISE No. 3.

I. Build doorway enclosing oblong door.

II. Build house front enclosing an oblong door and an oblong window.

III. Build house front enclosing an oblong door and two oblong windows.

IV. Build house front enclosing an oblong door and two square windows.

V. Build house front enclosing an oblong door, oblong window, and 1 square window.

VI. Build house front 6 inches long, 4 inches high, with two square windows.

VII. Build house front 4 inches long, 5 inches high, with two oblong windows.

VIII. Build house front 5 inches long, 5 inches high, with 1 oblong doorway and 1 oblong window.

IX. Build store front 6 inches long, 5 inches high, with 2 oblong doors; one 4 inches high, 2 wide and one 2 inches high, 1 wide.

X. Build house front 5 inches long, 4 inches high, with one oblong door 2 inches high, 1 inch wide, and one square window 1 inch wide.

BALANCE.

Suggestions only, not connected exercises.

I. Divide cube into parts; place all bricks in a standing position. Change them to a lying position; change to a sitting position; notice which faces they rest on, when standing; when lying; when sitting.

II. Place four bricks standing; place four bricks lying in front of them; lift the four in front; place one on top of each standing brick; then place a sitting brick on top of each standing brick; combine sitting and lying positions in the same way.

III. Pile bricks; 1 lying front to back, 1 lying left to right, etc., using all the bricks. Pile them sitting, in like manner; also standing.

IV. Combine standing and lying, sitting and lying, standing and sitting. Combine standing, lying, sitting.

APPROXIMATION TO SURFACE.

I. Lay floor 4 inches long, 4 inches broad, $\frac{1}{2}$ inch thick.

II. Lay floor 8 inches long, 2 inches broad, $\frac{1}{2}$ inch thick.

III. Lay floor 16 inches long, 1 inch broad, $\frac{1}{2}$ inch thick.

IV. Lay two floors 4 inches long, 2 inches broad, $\frac{1}{2}$ inch thick.

V. Lay four floors 2 inches long, 2 inches broad, $\frac{1}{2}$ inch thick.

COMMUNICATED MOTION.

SUGGESTIVE EXERCISES.

1. Stand two bricks, one front the other one inch back of it; arrange the other six bricks similarly. Touch the one in front each time, notice that it helps the other to move.

2. Arrange in groups of four; touch front one.

3. Arrange the eight bricks one inch apart in a row from front to back; touch front one.

4. Arrange in a row from left to right.

5. Arrange diagonally from right in front to left at the back; from left in front to right at the back.

6. Arrange in a continuous line across the table combining all the cubes.

7. Children take boxes to the circle; arrange in a circular effect and touch one.

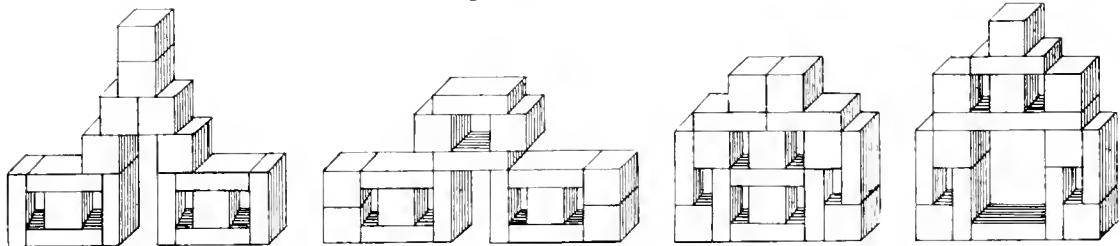
8. Arrange like a winding stream; touch one.

SUGGESTED EXERCISES.

Exercises combining Third and Fourth Gifts which may be used as a preparation for handling the Fifth Gift.

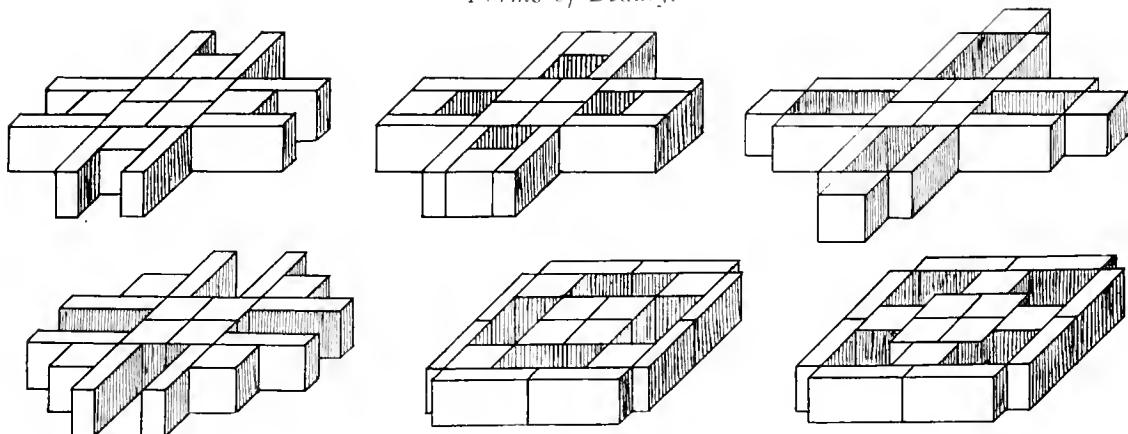
EXERCISE I.

Sequence Life Forms.



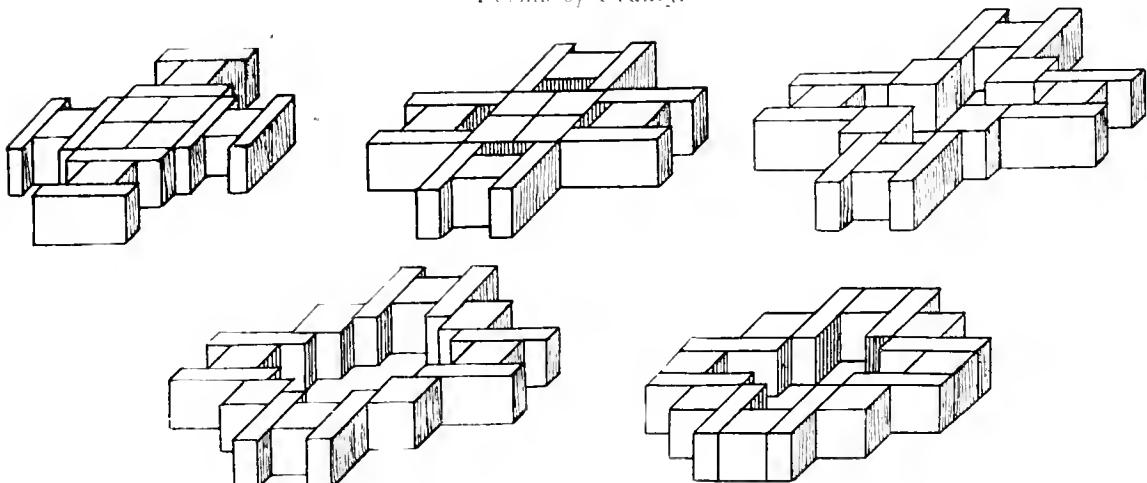
EXERCISE II.

Forms of Beauty.



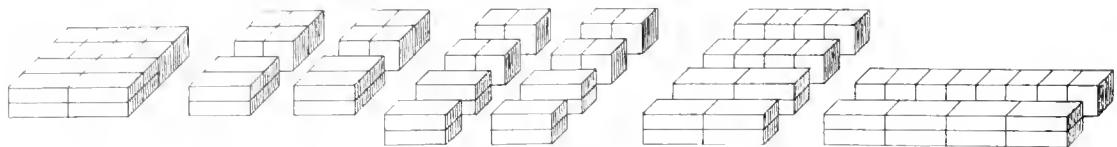
EXERCISE III.

Forms of Beauty.



EXERCISE IV.

Numerical Divisions.



BALANCE.

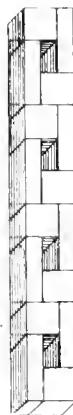
I.

(1) Brick lying from left to right; (2) cube placed above it in middle; (3) brick lying; (4) cube; (5) brick; (6) cube, etc.

II.

(1) Brick standing; (2) cube; (3) brick; (4) cube, etc.

III.



FIFTH GIFT OUTLINE.

I. Description of the Gift.	II. Salient Characteristics of the Gift.
III. Relationship in the Sequence of Gifts.	IV. Practical Purpose of the Gift.
V. Relationship to the Child.	

I. The Fifth Gift makes an advance in size of whole and in number of parts being a three-inch cube divided twice in each dimension, producing twenty-seven small cubes, six of which are again divided; three into halves and three into quarters, making in all thirty-nine parts.

II. The Salient Characteristics of the gift are the introduction of the oblique direction as a permanent feature, and the division into three and multiples of three; both these features were hinted at in the two preceding gifts, the oblique edge appearing in several forms and the number three suggested by the three-sided spaces enclosed in some of the forms. As a result of the new features, the forms are more artistic and the possibilities greater.

III. The Fifth Gift is the third in the set of building gifts, and emphasizes the relationship of part and whole more strongly by a pronounced individuality in some of the parts which renders them not interchangeable in position, as is quite possible in either of the preceding gifts, because of the similarity in the parts; the advance in number and form is most pronounced, requiring dexterous handling and mental alertness to manipulate its possibilities.

IV. The Practical Purpose of the gift is to serve as a complement to the Third Gift, to which it is related; its building possibilities assume a general character similar to those of the Third, although there is less suggestiveness in the gift as a whole, the parts lend themselves more readily to complete representation of architectural forms and the child is furnished a concrete experience with many new forms, i. e., Triangular Prism, Rhomboidal Prism, Trapezoidal Prism, Pentagonal, Hexagonal and Octagonal Prism, and a Prism whose bases are Trapeziums; planes—Right Isosceles Triangle, Rhomboid, Trapezoid, Trapezium, Pentagon, Hexagon, Octagon.

In number the gift emphasizes thirds, ninths and twenty-sevenths, rather than halves, quarters, and eighths.

V. The Fifth Gift demands, on the part of the child—(1) Physically, more technical skill; (2) Mentally, more definite conceptions through variety of observation; (3) Morally, more self-control, and more concentration, resulting in a strengthening of will.

The idea of Unity being gradually transferred from an external experience to an internal conception, the Fifth Gift affords the child an opportunity to express his individual conception of forms without imposing definitely suggestive material, and the constant demand upon him to relate parts and wholes prepares him for the use of separate elements to produce wholes.

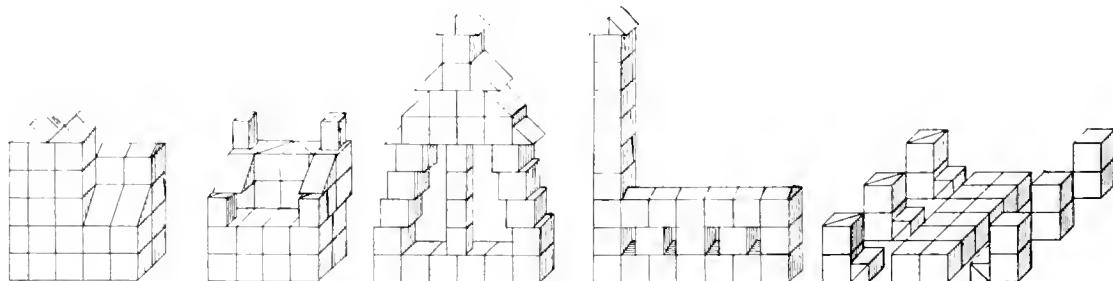
CHARACTERISTICS OF FIFTH GIFT EXERCISES.

The exercises in this gift take on a more complex form, since there is a marked advance in quantity of material as well as variety in form; we note a decided adaptability to the production of forms of knowledge, i. e., mathematical forms and a decided emphasis upon cubical contents, for which the child is prepared by the experience in dimension which he received in the Fourth Gift.

The new characteristic, the oblique line, should be in evidence in the exercises, and those forms which utilize it only by combining two or four triangular prisms into a cube, do not bring out the possibilities of the gift.

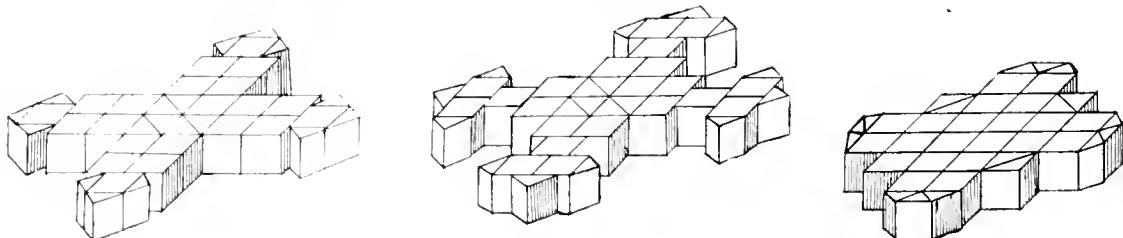
In number, the new division into thirds should be recognized and the child led to realize the possibilities of the number three and its multiples. The older children should analyze the various prisms according to number, form, relations and contents, and have varied experiences in discovering problems described according to form, and contents.

Life Forms.



Forms of Beauty.

Develop Sequences from following Bases:



NUMBER.

The cube divides naturally into thirds, ninths, twenty-sevenths, but may be arranged to include some divisions of the preceding gift, halves and quarters, and because of this possibility gives rise to the new divisions of sixths and twelfths.

SUGGESTED NUMBER ARRANGEMENTS.

I.

$$\begin{array}{ll} 1+1+1+1, \text{ etc., to } 27. \\ 3+3, \text{ etc., to } 27. \\ 9+9+9, \text{ etc., to } 27. \end{array}$$

II.

$$\begin{array}{ll} 1+26=27. & 4+23=27. \\ 2+25=27. & 5+22=27. \\ 3+24=27. & 6+21=27, \text{ etc.} \end{array}$$

III.

$$\begin{array}{lll} 1+1+25=27. & 4+4+19=27. & 7+7+13=27. \\ 2+2+23=27. & 5+5+17=27. & 8+8+11=27. \\ 3+3+21=27. & 6+6+15=27. & 9+9+9=27. \end{array}$$

IV.

$$\begin{array}{lll} 1+2+24=27. & 5+6+16=27. & 9+10+8=27. \\ 2+3+22=27. & 6+7+14=27. & 10+11+6=27. \\ 3+4+20=27. & 7+8+12=27. & 11+12+4=27. \\ 4+5+18=27. & 8+9+10=27. & 12+13+2=27. \end{array}$$

V.

$$\begin{array}{ll} 1+1+1+24=27. & 5+5+5+12=27. \\ 2+2+2+21=27. & 6+6+6+9=27. \\ 3+3+3+18=27. & 7+7+7+6=27. \\ 4+4+4+15=27. & 8+8+8+3=27. \end{array}$$

VI.

$$\begin{array}{ll} 1+2+3+4+17=27. & 4+5+6+7+5=27. \\ 2+3+4+5+13=27. & 5+6+7+8+1=27. \end{array}$$

VII.

$$\begin{array}{ll} 1+2+3+7+14=27. & 3+4+5+9+6=27. \\ 2+3+4+8+10=27. & 4+5+6+10+2=27. \end{array}$$

VIII.

$$\begin{array}{ll} 1+2+1+3+1+4+15=27. & 1+5+1+6+1+7+6=27. \\ 1+3+1+4+1+5+12=27. & 1+6+1+7+1+8+3=27. \\ 1+4+1+5+1+6+9=27. & \end{array}$$

FRACTIONS.

Divisions into:

1. Thirds, ninths, twenty-sevenths.
2. Halves, fourths, thirds, sixths, twelfths.
3. By concrete arrangements of the parts suggest the addition and subtraction of fractions.

$$\begin{array}{ll} \frac{1}{4} + \frac{1}{4} = \frac{1}{2}. & 1 - \frac{1}{4} = \frac{3}{4}. \\ \frac{1}{2} \times 1 \cdot 3 = \frac{3}{4}. & 1 - \frac{1}{2} = \frac{1}{2}. \\ \frac{1}{2} + \frac{1}{2} = 1. & 1 - \frac{3}{4} = \frac{1}{4}. \end{array}$$

These experiences with fractions may move from the very simple to more complex arrangements, according to the ability of the children, care being observed to have the arrangement discovered by the child in a concrete manner with the blocks.

FORM PRISMS, USING THE WHOLE GIFT.

Make one prism, using the whole gift, if possible, then make as *many* of the kind mentioned as possible.

1. Make square prisms.
2. Make oblong prisms or parallelopipeds.
3. Make rhomboidal prisms.
4. Make trapezoidal prisms. (Boat and shoe.)
5. Make prisms whose bases are trapeziums.
6. Make triangular prisms.
7. Make pentagonal prisms.
8. Make hexagonal prisms.
9. Make heptagonal prisms.
10. Make octagonal prisms.

PRISMS CONTAINING SPECIFIED CONTENTS.

Make a square prism containing 2.
Make a square prism containing 4.
Make a square prism containing 8.
Make a square prism containing 9.
Make a square prism containing 16.

Make a square prism containing 18.
Make a square prism containing 25.
Make a square prism containing $\frac{1}{2}$.
Make a square prism containing $4\frac{1}{2}$.

Using the whole gift make:

1. One square prism containing 16, one containing 9 and one containing 2 cubes.
2. One containing 16, one containing $4\frac{1}{2}$, one containing 4, one containing 2, one containing $\frac{1}{2}$.
3. Make one square prism containing 9, one containing 8, one containing 4, one containing 2, four containing 1.
4. Make two square prisms containing 9, one containing $4\frac{1}{2}$, one containing 4, one containing $\frac{1}{2}$.
5. Using the whole gift make square prism containing 4, oblong prism containing 8, rhomboidal prism containing 4, boat trapezoidal prism containing $\frac{3}{4}$, shoe trapezoidal prism containing 6, prisms whose bases are trapeziums containing $4\frac{1}{4}$.

Triangular prisms as well as all the other forms may be worked out similarly.

SIXTH GIFT OUTLINE.

I. Description of the Gift.	II. Salient Characteristic of the Gift.
III. Relationship in the Sequence of Gifts.	IV. Practical Purpose of the Gift.
V. Relationship to the Child.	

I. The Sixth Gift is a three-inch cube divided into thirty-six parts, eighteen of which are oblong prisms or parallelopiped, like the Fourth Gift, twelve parts are square prisms whose bases are one inch squares, while six parts are square prisms whose bases are one-half inch squares.

II. The Salient Characteristic of the Sixth Gift is the completion of the possibilities which grow out of a difference in dimension; while it introduces no new contrasts, it combines many of the contrasts of the preceding gifts, uniting also the number possibilities by illustrating two and multiples of two as well as three and multiples of three.

III. The Sixth Gift is the fourth and last in the set of building gifts and gathers together many of the possibilities of the three preceding gifts, emphasizing particularly number, size and dimension; the demand for accuracy in construction renders its office in developing definite ideas, valuable.

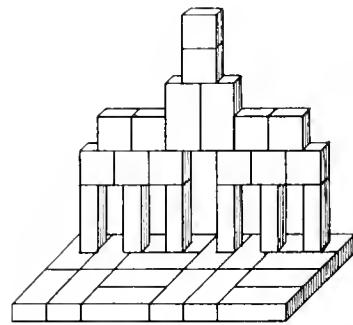
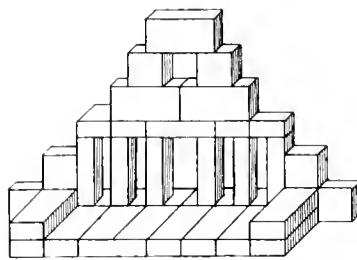
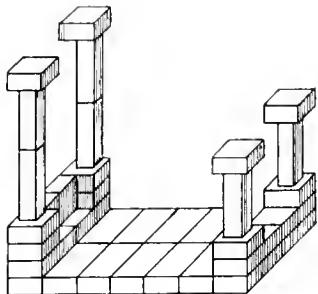
IV. The Practical Purpose of the gift is a manifest intention to complete the experience of dimension which was begun in the Fourth Gift, and to define the child's ideas of number as an element in securing proportion in architectural design. It tends to emphasize independence in construction and conscious planning to secure the use of every part.

V. The Sixth Gift provides the child with a quantity of material which requires a careful regard for balance in its manipulation and which gratifies his love of the beautiful in its forms, as well as stimulating the number instinct by the calculation of dimensions in the forms; it prepares for the use of the Seventh Gift, because the parts are so many that the child must of necessity hold their relation to each other in his mind and in a measure plan his form in order to utilize his material. In the Sixth Gift he utilizes all his experiences with universal qualities and enters a larger field for constructive activity.

CHARACTER OF SIXTH GIFT EXERCISES.

The exercises in this gift re-establish the experiences in dimension, balance, communicated motion, enclosure of space, and cause the child to desire more accurate forms in construction.

Life Forms.



SEVENTH GIFT OUTLINE.

I. Description of the Gift.	II. Salient Characteristics of the Gift.
III. Relationship in the Sequence of Gifts.	IV. Practical Purpose of the Gift.
	V. Relationship to the Child.

I. The Seventh Gift consists of a number of wooden tablets which represent plane figures, as follows:

1. Square.
2. Right Isosceles Triangle.
3. Acute Isosceles Triangle.
4. Obtuse Isosceles Triangle.
5. Right Scalene Triangle.
6. Obtuse Scalene Triangle.
7. Equilateral Triangle.

II. The Salient Characteristic of the Seventh Gift is the abstraction of the surface from the solid, which results in a conscious idea of plane figures apart from solid forms.

III. The Seventh Gift is the first in the third set of gifts and marks the elimination of one dimension of the solid, namely, thickness moving, thus from concrete representation to abstract or surface representation.

It connects with the cubical form of the building gifts through the square, which is the surface directly derived from the face of the cube; the triangular planes are derived, by comparison, from the square. By attracting direct observation to the sides and angles of the plane figures, the Seventh Gift foreshadows the embodied line and point in the succeeding gifts.

IV. The Practical Purpose of the gift is to supply separate elements based upon geometric form, with which new wholes may be created in accordance with a definite internal idea.

The representation deals with the surface only and suggests the advantages of Drawing, for which it is a valuable preparation.

V. The Seventh Gift leads the child from construction of the object itself to a surface representation of it, eliminating in a measure its reality to him, yet developing the power to conceive the whole, by means of the part produced, and thus aiding the mind in forming its own ideals. The organic unity is set aside in an external sense and the parts bear no relation to each other except as they are set in a relation to fulfill certain conditions in producing a form which exists as a unity in the mind of the child; it is necessary that the child shall express himself individually in this gift, hence there is a pronounced emphasis upon free invention in the use of the elements.

The following points may be worked out, with each of the seven planes composing the Seventh Gift.

I.

Describe, derive and define the plane figure.

II.

Find the possible positions of one plane figure.

III.

Find the relative positions of two plane figures.

IV.

Find the mathematical figures with two.

V.

Find the mathematical figures with three.

VI.

Invent Forms of Life with given numbers 1, 2, 4, 8, 16, 32, 64.

VII.

Invent Forms of Beauty in four ways.

1. From a given center.
2. By repetition of the same figure.
3. By combination of two or more figures.
4. A sequence.

VIII.

Develop the mathematical figures, which are possible, increasing the size of each succeeding one, by adding regularly to the preceding one, in a similar manner each time.

IX.

Comparison of mathematical figures made with the same number of planes in each.

X.

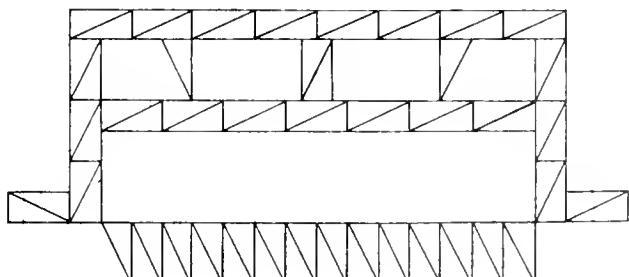
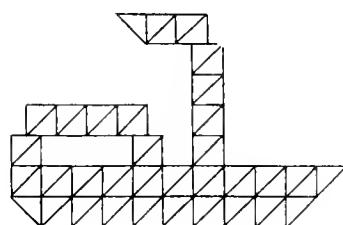
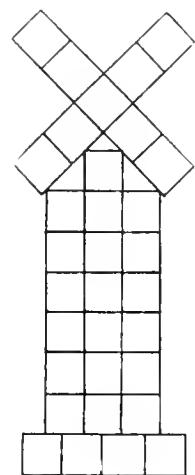
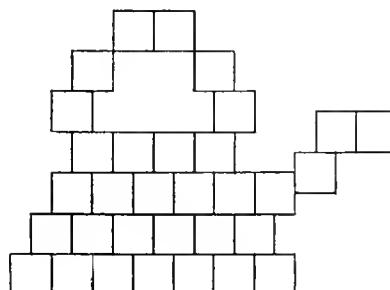
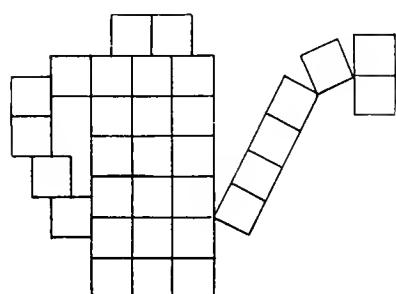
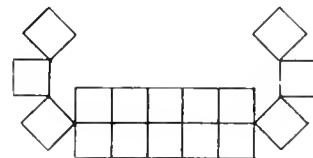
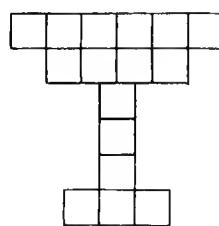
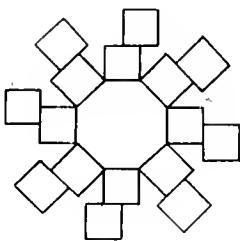
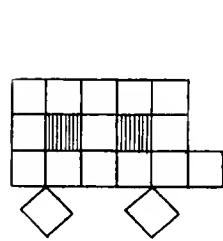
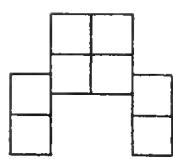
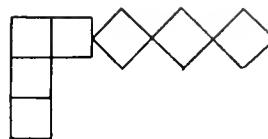
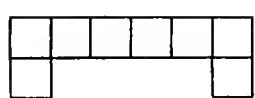
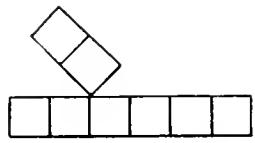
Analyze by separating into mathematical forms.

1. A form of Life.
2. A form of Beauty.
3. A form of Knowledge.

CHARACTER OF SEVENTH GIFT EXERCISES.

In Life forms the representation of one surface, or the picture of the object is emphasized. In forms of Beauty the proper balance is sustained by relating opposites to a given center which gives strength to the design by holding it together.

SUGGESTED LIFE FORMS.



EIGHTH GIFT OUTLINE.

I. Description of the Gift.	II. Salient Characteristic of the Gift.
III. Relationship in the Sequence of Gifts.	IV. Practical Purpose of the Gift.
V. Relationship to the Child.	

I. The Eighth Gift should include all which has to do with linear representation, hence it would consist of slats, sticks and rings; the slats are frequently relegated to the occupations but fit in with the gifts, forming a mediatory step between the surface and the line by retaining the dimension of breadth in a slight degree.

II. The Salient Characteristic of the Eighth Gift is the abstraction of line from surface, thereby eliminating the dimension breadth, and furthering the analytic progression toward the point. As a result it emphasizes the quality of direction most particularly.

III. The Eighth Gift supplies separate elements which have less suggestiveness than the seventh, as well as less individuality. It relates back to the other gifts by suggesting the edge in the solid forms and the side in the surface forms.

IV. The Practical Purpose of the Gift is to emphasize linear outlines of objects and attract attention to the relation of angles and sides. It lends itself most readily to the production of artistic forms and affords an opportunity for cultivating a love for true and beautiful design.

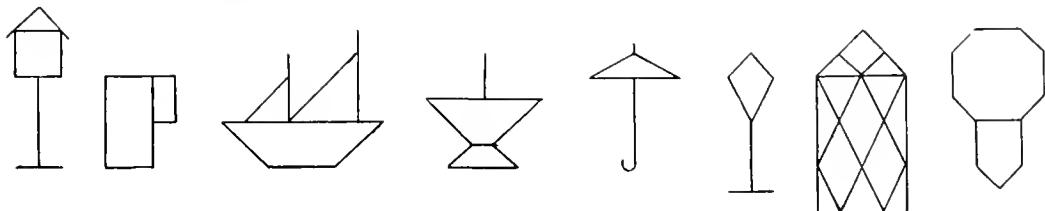
V. The Eighth Gift demands skillful manipulation on the part of the child, and presupposes definite experiences of form in order to create new and varied combinations.

CHARACTER OF EIGHTH GIFT EXERCISES.

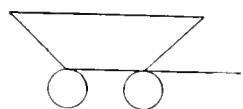
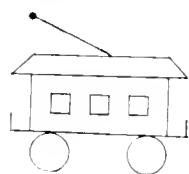
The Eighth Gift lends itself to the production of forms of life, borders, designs, mosaics and also the elements of mathematical form, lines and angles, in various positions. It is possible to have a great variety because of the difference in length of sticks and sizes of rings and half rings; children should be encouraged to invent freely with these elements and to observe the relative positions and the size of angles and length of sides in the figures.

LIFE FORMS WITH STICKS.

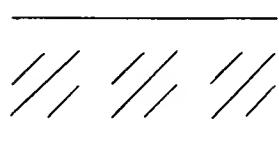
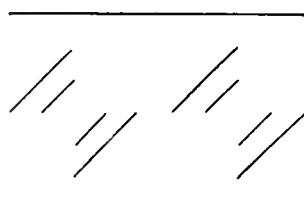
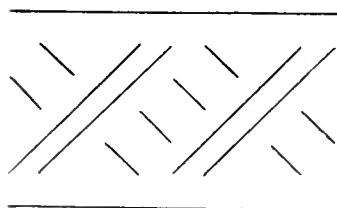
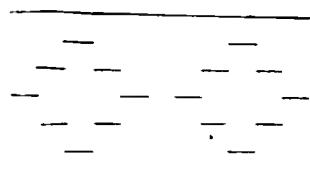
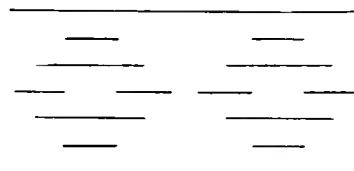
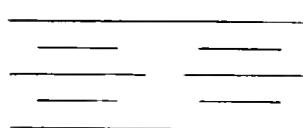
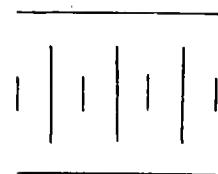
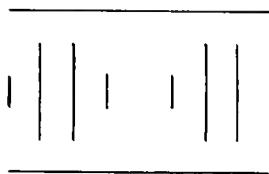
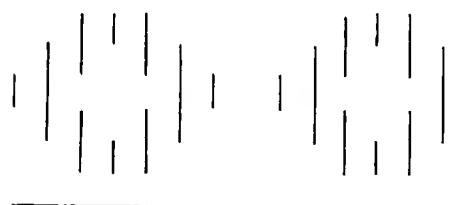
Network Lines Omitted in Some of the Stickwork.



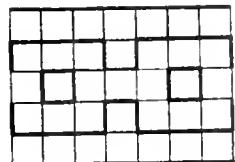
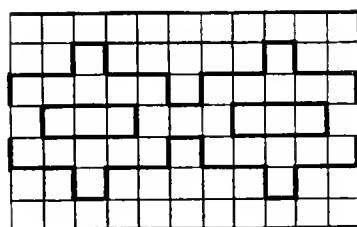
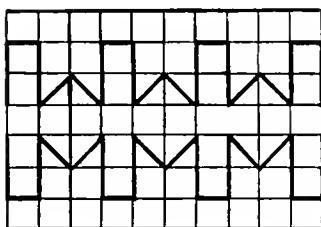
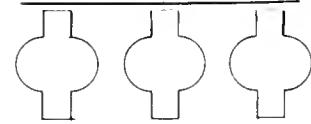
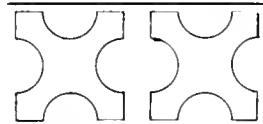
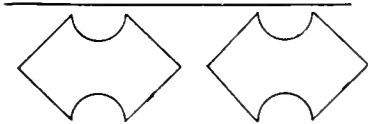
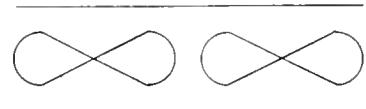
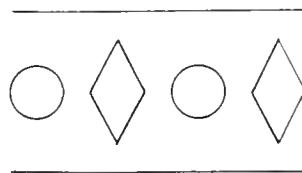
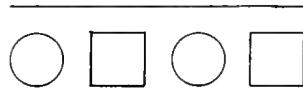
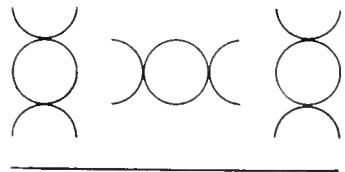
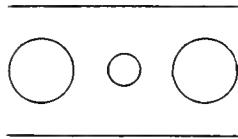
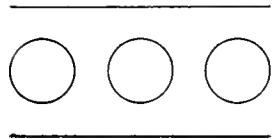
LIFE FORMS WITH STICKS AND RINGS.



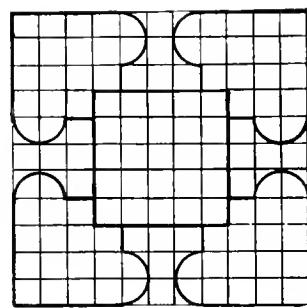
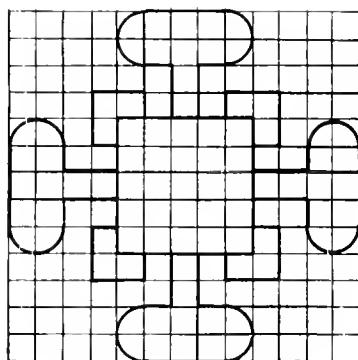
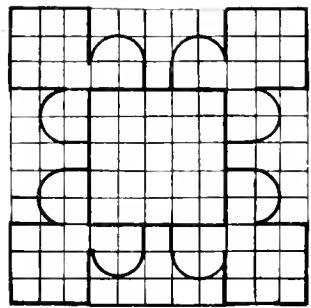
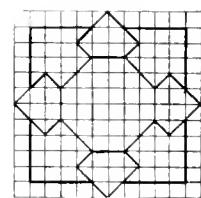
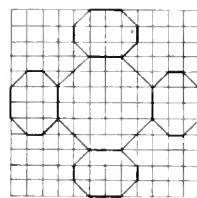
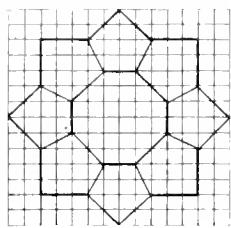
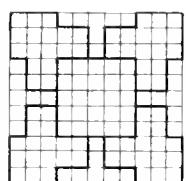
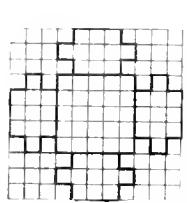
BORDERS.



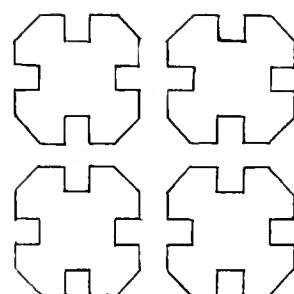
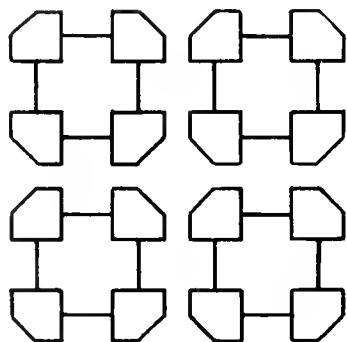
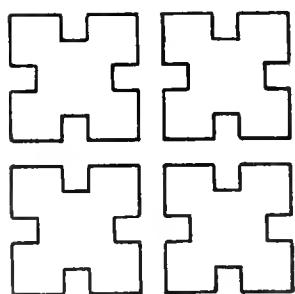
BORDERS.



DESIGNS.



MOSAICS.



NINTH GIFT OUTLINE.

I. Description of the Gift.	II. Salient Characteristic of the Gift.
III. Relationship in the Sequence of Gifts.	IV. Practical Purpose of the Gift.
V. Relationship to the Child.	

I. The Ninth Gift consists of lentils or small seeds, intended to represent the point.

II. The Salient Characteristic of the Ninth Gift is the elimination of the dimension length and the emphasis upon the quality, position, showing the line as generated by a succession of points.

III. The Ninth Gift arrives at the point and supplies a number of separate elements with which to produce the outlines of objects. It completes the sequence of Gifts and forms the connecting link between Gifts and Occupation by emphasizing the point which is produced in the first occupation, *i. e.*, pricking.

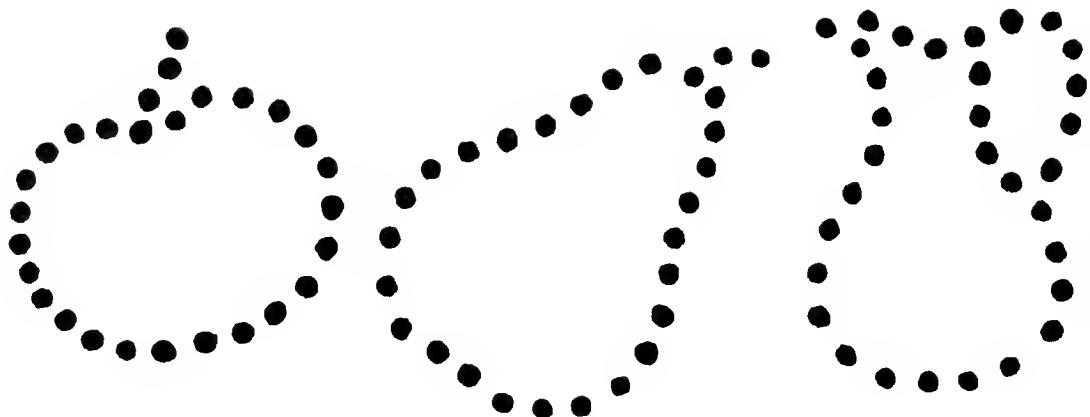
IV. The Practical Purpose of the Gift is to attract attention to the outlines of objects by means of a succession of points; points in position are emphasized; front, back, middle, right, left, etc.

V. The Ninth Gift may be used with young children to outline forms which are drawn previously; with the older children it is well to have them outline without drawings, as it cultivates accuracy of observation in regard to form.

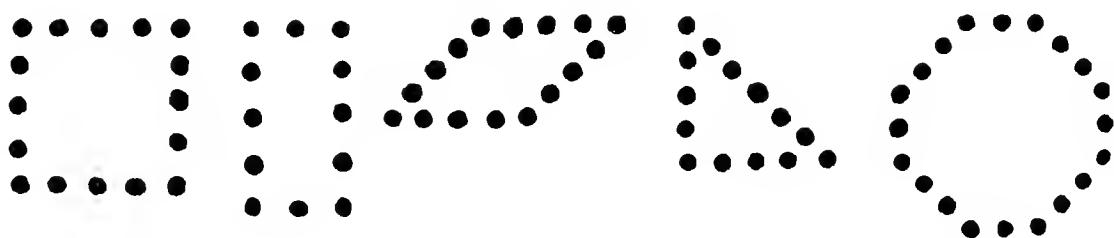
CHARACTER OF NINTH GIFT EXERCISES.

The exercises with the Ninth Gift should be short, where small lentils are used, as the concentration is rather tedious and the form so easily disturbed; for this reason the lentil is frequently displaced by Mrs. Hailman's Second Gift Beads, which answer the purpose in many respects and are admirable for stringing in various combinations of number and color; however, very interesting exercises may be given with the lentil proper.

OUTLINES OF CURVILINEAR FORMS.



OUTLINES OF MATHEMATICAL FORMS.



SUGGESTIONS FOR ORIGINAL WORK.

I. GIFT.

1. Invent exercises for very young children which shall have for their basis, simple activities often repeated.
2. Invent exercises developing *Form, Color, Direction, Number*, for older children.
3. Invent exercises developing rhythm of movement.

II. GIFT.

1. Invent exercises which will be purely movement games, for the young children.
2. Invent an exercise which shall bring out the relation between the three type forms.
3. Invent exercises developing qualities of the individual objects.

III. GIFT.

1. Invent simple life forms for younger children, in which the material is massed together.
2. Invent life forms illustrating building materials, which are used in the construction of a house.
5. Invent tools.
6. Invent forms of beauty.

IV. GIFT.

1. Invent life forms.
2. Invent forms emphasizing enclosure of space.
3. Invent forms emphasizing dimension.
4. Invent exercises combining III. and IV. Gifts.

V. GIFT.

1. Invent life forms, introducing the various prisms as bases.
2. Invent furniture.
3. Invent ships.
4. Invent forms of beauty.

VI. GIFT.

1. Invent military forms, forts, etc.
2. Invent churches.
3. Invent fronts of large public buildings.
4. Invent forms of beauty.

VII. GIFT.

1. Invent life forms, with various numbers of tablets of different kinds.
2. Invent forms of beauty; single forms and sequences.
3. Invent forms combining two or more kinds of tablets.

VIII. GIFT.

1. Invent border arrangements, bringing out the mathematical forms..
2. Invent life forms from simple bases.
3. Invent more elaborate life forms.
4. Invent designs from bases of square and octagon.
5. Invent life forms with wings and half wings.
6. Invent borders, with sticks and rings.
7. Invent designs with sticks and rings.

SLATS OR INTERLACING.

1. Using large slats invent life forms such as gates, doors, etc., such as are capable of being changed from one form into another.

IX. GIFT.

1. With lentils, invent outlines of fruits, vegetables and flowers.
2. Invent simple outlines of curvilinear objects.
3. Invent designs.

LIBRARY OF CONGRESS

0 019 823 294 4